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U.S. Bureau of Mines

Quarry accidents in the United States

Washington

1915

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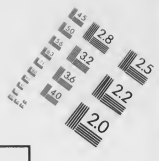

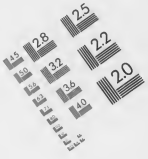

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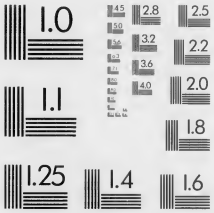

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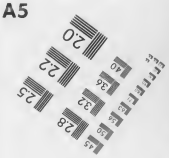

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DEPARTMENT OF THE INTERIOR
FRANKLIN K. LANE, SECRETARY
BUREAU OF MINES
VAN H. MANNING, DIRECTOR

QUARRY ACCIDENTS IN THE UNITED STATES

DURING THE CALENDAR YEAR 1914

COMPILED BY
ALBERT H. FAY

WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

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QUARRY ACCIDENTS IN THE UNITED STATES DURING THE CALENDAR YEAR 1914.

Compiled by ALBERT H. FAY.

INTRODUCTION.

According to reports received by the Bureau of Mines and presented in this paper the number of men killed in and about the quarries in the United States during 1914 was 180, as compared with 183 in 1913. The number of men employed in the quarry industry during 1914 was 87,936, as compared with 106,278 in 1913, 113,105 in 1912, and 110,954 in 1911. The fatality rate for 1914 was 2.05 per 1,000 men employed, as compared with 1.72 in 1913, 1.88 during 1912, and 1.69 during 1911.

The figures for the number of men employed are summarized in the following tabulation:

Number of men employed, days' work performed, and number of men killed at all quarries in the United States.

Year.	Number of men employed.			Total shifts.	Number killed.	
	Inside.	Outside.	Total.		Total.	Per 1,000 employed.
1911	79,879	31,075	110,954	25,325,094	188	1.69
1912	75,962	37,143	113,105	28,151,043	213	1.88
1913	75,387	30,891	106,278	26,142,237	183	1.72
1914	67,784	20,152	87,936	20,456,157	180	2.05

The 1914 returns show a decrease in the number of active quarries from which returns were obtained. This decrease is largely compensated by reporting the quarry idle, so that the total number of reports received is about the same as in previous years. Cement and concrete have largely replaced certain classes of building stone, especially rough stone for foundations and retaining walls, with the result that many small quarries are not being worked. Often rough stone that can be crushed and used in concrete is available near the place where construction is in progress, whereas stone suitable for

rough masonry lies at some distance. The result is that the quarry stone operator can not compete with the cheaper material.

The production of quarry products also decreased, and the number of days active was 13 less than in 1913. The number of days worked per man in 1914 was 233, as compared with 246 in 1913, 249 in 1912, and 228 in 1911.

The total number of men employed in or about the coal mines in the United States in 1914 was 763,185, and of this number 2,454 were killed, or 3.22 per 1,000 employed. In 1914 the metal mines employed 158,115 men, of whom 559 were killed, or 3.54 per 1,000 men employed.

In the coal mines the fatalities due to falls of roof and pillar (Table 21) were, in 1914, 46.09 per cent of all fatalities. Although quarry work is done chiefly in the open, yet falls of rock or overburden caused 29.45 per cent of the fatalities reported for 1914. The percentage of fatalities in metal mines in 1913 from this cause was 36.16. The principal hazards of quarrying for the four years for which records are available appear to be as follows: Explosives and falls of quarry material (each being about equal and together representing about one-half of all fatalities); haulage is third in importance with about 20 per cent; and falls of persons is fourth with 9 to 13 per cent.

In France (Table 27) the fatality rate from quarry accidents is seldom more than 1 per 1,000 men employed. In Great Britain (Table 28) for the 10 years 1895 to 1904 the rate was 1.09 per 1,000 men employed, and in 1913 was 1.05. The higher fatality rate in the quarries of the United States probably results from less stringent regulations and less systematic inspection. The workers, as a rule, have ample light and air and are not exposed to the risk of roof falls; hence the fatality rate should be lower than in underground coal and metal mines. Yet the fatality rate in open quarries in the United States is even higher than in many of the coal or metal mines of foreign countries.

ACKNOWLEDGMENTS.

The bureau takes pleasure in acknowledging the prompt cooperation of the operators who have kindly furnished the information summarized in this report. As a result of this cooperation the bureau is able to assemble a set of quarry-accident statistics on a uniform basis for four calendar years. The statistics for New York were furnished by W. W. Jones, State mine inspector, Albany, N. Y., to whom credit is herewith given. Credit is also given to W. W. Adams and E. S. Boalich, of the Bureau of Mines, for assistance in the compilation of the figures herein presented.

PUBLICATION OF ACCIDENT STATISTICS.

In publishing the figures contained in this report the Federal Bureau of Mines has no intention of encroaching on the field covered by the annual or biennial reports of the State mine inspectors or mining departments. It is hoped, however, that the distribution of the data contained herein will help to establish a uniform basis for recording and reporting quarry accidents, the number of men employed, and the number of days' work performed. By all of the statistics being thus placed on the same basis, the making of comparisons between different kinds of quarries or between quarries in different States, and the drawing of conclusions will be rendered much easier.

The plan that, it is believed, will yield best results in procuring satisfactory data is that of cooperation between the Bureau of Mines and the inspectors or other appropriate representatives of the States. This plan will also have the merit of avoiding duplication of labor and expense and will insure satisfactory results at minimum cost to both the Federal Government and the several States. Attention is called to the fact that many States have no system of quarry inspection and there is a lack of uniformity in the reports issued by the States that have inspectors. Moreover, the fiscal years of the States are not uniform; some end in June, others in September or October, and still others conform to the calendar year.

The Bureau of Mines will be glad to receive suggestions from State inspectors and other persons interested in quarrying as to the form in which statistical data can be presented most effectively and as to methods of making such data of most use to the quarry industry.

SCOPE OF STATISTICS.

The tables giving the accidents in the quarries in the United States for the calendar year 1914 have been compiled by the Bureau of Mines from reports received directly from the operators (except in New York) and represent all stages of the industry. In the collection of the statistics the effort was made to obtain returns from all quarries, without regard to their size or the number of men employed.

Although the Bureau of Mines is authorized to collect data relating to accidents at mines and quarries, there is no Federal law compelling operators to render such reports. The reports received from operators are voluntary responses to the bureau's requests for this information. The majority of these requests were answered cheerfully and immediately. The statistics herein tabulated represent 2,680 operators who actually worked their quarries during the year. As far as can be ascertained all of the large companies made out detailed reports, so that, measured by production, the statistics are thoroughly representative of the industry.

Many of the answers received indicate that one reason why some operators did not reply was that their quarries were small, and as no accidents had occurred a reply was not deemed necessary. It is hoped that every operator, whether his quarry is large or small and whether an accident occurred or not, will consider his property worthy of a report for the past year. The true accident ratio can be obtained only when all reports rendered give the number of men employed as well as the number of days worked.

SERIOUS AND SLIGHT INJURIES.

The definition of an accident, which is of fundamental importance, is different among the various mining, quarrying, and metallurgical companies. One operator may require a detailed report of any casualty, however slight, that delays the worker, or that draws blood; another may not consider an accident worthy of record that does not come to the attention of the foreman or shift boss.

The higher accident rate in one State as compared with those of other States may be due to the fact that more complete records have been kept. Companies employing only a few men do not, as a rule, keep a complete register of the serious and slight injuries; hence these ratios in some States may be low, but such low rates do not necessarily indicate that the danger is less than in an adjoining State.

SERIOUS INJURY.

The distinction made in this report between a serious and a slight injury is entirely arbitrary and is in accordance with that used by the bureau in the collection of mine and quarry accidents since 1911. A line had to be drawn at some definite point, and hence a serious accident is considered in this report as one that would disable a man and keep him from duty 20 days or more. This class includes such injuries as broken arms and legs, loss of eye, and severe cuts and bruises.

SLIGHT INJURY.

A slight injury is considered as one that involves a loss of time of more than 1 day but less than 20 days. Under this class may be placed such injuries as cuts, sprains, mashed fingers, bruises, dirt in eye, and slight burns. Of course any slight injury may become infected and thus result in a serious accident as defined above.

REVISED CLASSIFICATION OF INJURIES FOR 1915 AND 1916.

Many of the States now have compensation laws, and in order to conform with their classifications the bureau's new classification of serious and slight injuries will be on a 14-day (2 weeks) basis instead of 20-day, as at present. Therefore, it will facilitate the rendering of future reports, if, in keeping records, all operators will classify injuries as follows:

1. Fatal.
2. Serious injury (time lost, more than 14 days):
   - (*a*) Permanent disability.
     - Total,
     - Partial,
   - (*b*) Others.
3. Slight injury (time lost, 1 to 14 days, inclusive).

VALUE OF QUARRY PRODUCTS.

Tables 23 and 24, compiled from statistics published by the United States Geological Survey, are printed to show the magnitude of the quarrying industry in the United States.

QUARRY-ACCIDENT STATISTICS BY STATES.

A compilation of the quarry-accident statistics by States is given in Tables 3, 4, 5, and 6. These tables contain figures from the combined reports of 2,680 operators. The total number of men employed was 87,936, of whom 67,784 were employed in the quarries and 20,152 outside of the quarries. The totals for fatalities, serious injuries, and slight injuries due to accidents reported are as follows: Deaths, 180, or 2.05 per 1,000 men employed; serious injuries, 1,289, or 14.66 per 1,000; slight injuries, 6,547, or 74.45 per 1,000 men employed.

DETAILED TABULATION OF ACCIDENTS.

The quarries are classified according to the rock quarried, as follows: Cement rock, granite, limestone, marble, sandstone and bluestone, slate, and trap rock. The tables show the number of persons killed, seriously injured, and slightly injured, the number of operators reporting, the number of men employed both in and out of the quarries, the days' labor performed, and the rates of deaths and injuries per 1,000 men employed.

A summary of the more important figures for all quarries in the United States during the years 1913 and 1914 is given in Table 1. The causes of the accidents and the percentage of accidents due to any one cause are given in detail in Table 2. Wherever possible, comparative figures for 1911, 1912, and 1913 are given with the tables for 1914.

GRANITE QUARRIES.

The figures for granite quarries, by causes and States (Tables 7 and 8) are compiled from reports of 442 operators, employing 14,905 men, of whom 11,012 were employed in the quarries and 3,893 outside of the quarries. The totals of deaths and injuries due to acci-

dents reported are as follows: Deaths, 38, or 2.55 per 1,000 men employed; serious injuries 214. or 14.36 per 1,000; and slight injuries, 1,022, or 68.57 per 1,000.

LIMESTONE QUARRIES.

The figures for limestone quarries, by causes and States (Tables 9 and 10) are compiled from the reports of 1,423 operators, employing 42,730 men, of whom 32,771 were employed in the quarries and 9,959 outside of the quarries. The averages for the number of days worked in 1911, 1912, 1913, and 1914 are 224, 246, 243, and 233. The totals of deaths and injuries due to accidents reported are as follows: Deaths, 79, or 1.85 per 1,000 men employed; serious injuries, 589, or 13.78 per 1,000; and slight injuries, 3,197, or 74.82 per 1,000.

SANDSTONE AND BLUESTONE QUARRIES.

The figures for sandstone and bluestone quarries, by States (Tables 11 and 12) are compiled from reports of 374 operators, employing 8,642 men, of whom 7,489 were employed in the quarries and 1,153 outside of the quarries. The totals of deaths and injuries due to accidents reported are as follows: Deaths, 9, or 1.04 per 1,000 men employed; serious injuries, 68, or 7.87 per 1,000; and slight injuries, 360, or 41.66 per 1,000.

CEMENT ROCK.

The cement-rock quarries (Table 13) are represented by 81 operators, who employed 5,715 men during 1914. The totals of deaths and injuries due to accidents reported are as follows: Deaths, 20, or 3.50 per 1,000 men employed; serious injuries, 200, or 35 per 1,000; and slight injuries, 945, or 165.35 per 1,000 (Tables 1 and 2). The high ratio of injuries in the cement-rock quarries as compared with other quarries is probably due to many cement quarries being operated by large corporations, that keep better records of serious and slight injuries and render more detailed reports. Many small quarries keep no record of serious and slight injuries, hence the seemingly low ratio of nonfatal accidents in quarries other than cement rock and limestone. It must also be taken into consideration that the men in this part of the quarry industry worked 266 days, from 33 to 51 days more than in the granite, limestone, or sandstone quarries. It is also possible that a few mill accidents have been included, although every effort has been made to eliminate them.

CAUSES AND DISTRIBUTION OF ACCIDENTS.

In Tables 15, 16, and 17 are given the percentages of deaths and injuries due to causes in each class of quarries and for all the quarries combined; they also show in parallel columns the fatality and injury rates per 1,000 men employed. It will be noted, for instance, that in limestone quarries 26.58 per cent of the deaths and 13.75 per cent of the serious injuries were due to falls of rock or quarry material. A similar comparison may be made for any class of quarries for any one of the 24 causes enumerated. These tables show that about 66 per cent of the deaths in and about the quarries during 1914 were due to the following three causes in the order named: Falls or slides of quarry material and overburden, explosives, and haulage. The fatal accidents during the last four years are about equally divided between explosives and falls of quarry material and overburden.

FATALITY AND INJURY RATIOS COMPARED ON BASIS OF YEAR OF 300 WORKING DAYS.

The tables in this report show wide differences in the number of days the quarries were worked during the year. Therefore the actual time of operation should be taken into account in considering accident ratios. It is evident that if a group of men in one State—Kentucky, for example (Table 3)—works only 195 days during the year, and a similar group in another State, as Maine, works 249 days in the same industry, the hazard is not equal, and the fatality rates of 1.92 for Kentucky and 1.86 for Maine are not fairly comparable. To make them comparable they must have a common denominator in the number of days worked.

As a quarry can be worked only about 300 days in a year, if Sundays, holidays, and a few days for repairs be excluded, a 300-day year has been used in comparing the accident rates in the various States in Table 18. The average number of days that quarries worked during the year ranged from 148 in Idaho to 279 in Florida, the average for the United States being 233. Table 18 shows that on the equal-time basis (300 days) the Kentucky rate rises to 2.95 and the Maine rate rises to 2.24, so that if the total time of exposure to risk be taken into consideration the difference between the two States is increased. The difference on the reported time basis is only 0.06, while the 300-day basis raises this difference to 0.71.

QUARRY AND MINE ACCIDENTS COMPARED.

Table 19 shows the number of men employed and number killed in the quarries and in the coal and metal mines of the United States, with the fatality rate based on the actual number employed and the time worked. It also compares these industries on the equal 300-day basis.

Table 21 shows the percentage of fatalities in these industries classified by principal causes of death.

ACCIDENTS DUE TO EXPLOSIVES.

It will be noted from Table 21 that the number of fatalities due to the use of explosives in quarries varies from about 19 to 27 per cent of the total, or that it is about five times as great as in coal mines, or twice as large as in metal mines. As quarries are operated in the open and the larger part of the work is done during daylight, it would seem that the comparative number of fatalities due to the use of explosives could be greatly reduced. The figures of Table 27 indicate that in the quarries of France only 10 per cent of the fatalities is due to explosives. In the coal-mining industry and in many of the larger metal mines the handling of explosives is usually delegated to only a few men, the promiscuous handling of explosives being prohibited.

In all quarries employing, say, 10 men, 1 experienced man should be delegated to handle all explosives and to do all the loading and firing. When each driller loads and fires his shots there is the possibility of other workers being near who may fail to hear or heed the warning. Sometimes the man who fires the shot may fail to give any warning whatever. If all of the firing is under the direction of one man much confusion and misunderstanding will be eliminated. Furthermore, whenever practicable, all blasting should be done at a certain hour each day. Under such practice the men soon become accustomed to the established routine and are on their guard. Danger signals should be placed in conspicuous places wherever explosives are used or stored.

PRECAUTIONS TO BE TAKEN WITH EXPLOSIVES.

The following precautions, adapted from Miners' Circular 7[a] to suit quarry conditions, are given for the purpose of calling attention to some of the principal dangers in handling explosives:

Never open a metal keg of powder with a pick or metal object. Use the opening provided by the manufacturer of the keg.

Never return to a shot that has failed to explode until at least **10 minutes** after lighting it, if squibs were used, or **12 hours** after lighting if **fuse** was used. When shots are fired electrically be sure that **all** wires are disconnected from the battery, and wait at least **5 minutes** before returning to the face.

Never allow powder or other explosive to remain exposed. Keep it in a well-locked box at least 100 feet from the working face and in an unfrequented place.

Never go nearer than 5 feet to a powder box or powder when smoking.

Never allow the point of the drill to become dull or to become of less than the standard gage, so that a drill hole may be made with it into which the cartridge may always be pushed freely.

[a] Rutledge, J. J., The use and misuse of explosives in coal mining: Miners' Circular 7, Bureau of Mines, 1913, pp. 32 33.

Never withdraw a shot that has missed fire. Drill a fresh hole at least 2 feet from it but parallel to the old hole and fire this new hole. After the shot a careful search should be made for the unexploded charge to prevent its being struck by a pick and perhaps causing an explosion.

Never use iron or steel tampers or needles. Have at least 6 inches of hard-drawn copper on the tamping end of the bar or, better still, use a hardwood tamping stick. The needle should be made entirely of hard-drawn copper.

Never tamp shots with an iron or steel scraper, and do not push a cartridge into the drill hole with the scraper. The scraper rod should be tipped with at least 6 inches of brass or copper on the scraping end.

Never take more than one day's supply of explosives into the quarry at one time.

Never leave explosives in the quarry overnight.

Never attempt to use frozen dynamite.

Never crimp a "cap" with the teeth. This practice is dangerous. Use the crimper.

QUARRY ACCIDENTS IN FOREIGN COUNTRIES.

Tables 25 to 29 contain data concerning the number employed, number killed, etc., in the quarries of Algeria, Belgium, France, Great Britain, and Italy. These tables are given to show the low fatality rate in those countries. In Algeria the industry is comparatively small, but the fatality rate is higher than in any of the other countries named.

TABULATED STATISTICS.

The tables of statistics for quarry accidents in the United States during the calendar year 1914 follow.

TABLE 1.—*Number of men employed and number of men killed in and about* ***all*** *quarries in the United States during the calendar years 1914 and 1913.*

CALENDAR YEAR 1914.

Kind of quarry.	Active operators.	Number of employees.			Killed.						Seriously injured.						Slightly injured.						Widows.	Orphans.
					In quarry.		Outside of quarry.		Total.		In quarry.		Outside of quarry.		Total.		In quarry.		Outside of quarry.		Total.			
		In quarry.	Outside of quarry.	Total.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.	Number.	Rate per 1,000 employed.		
Cement rock	81	4,296	1,419	5,715	17	3.96	3	2.10	20	3.50	160	37.24	40	28.19	200	35.00	772	179.70	173	121.92	945	165.35	12	15
Granite	442	11,072	3,893	14,965	32	2.91	6	1.54	38	2.55	187	16.98	27	6.94	214	14.36	919	83.45	103	26.46	1,022	68.57	20	47
Limestone	1,423	32,771	9,959	42,730	59	1.80	20	2.01	79	1.85	445	13.58	144	14.46	589	13.78	2,524	77.02	673	67.58	3,197	74.82	38	81
Marble	65	2,558	290	2,848	7	2.74	.....	.....	7	2.46	40	15.64	10	34.48	50	17.56	234	91.48	28	96.55	262	91.99	5	9
Sandstone and bluestone	374	7,489	1,153	8,642	8	1.07	1	.87	9	1.04	62	8.28	6	5.20	68	7.87	309	41.26	51	44.23	360	41.66	5	9
Slate	133	4,081	1,922	6,003	11	2.70	3	1.56	14	2.33	32	7.84	7	3.64	39	6.50	82	20.09	13	6.76	95	15.83	9	11
Trap rock	162	5,577	1,516	7,093	11	1.97	2	1.32	13	1.83	107	19.19	22	14.51	129	18.19	575	103.10	91	60.03	666	93.90	6	6
Total, 1914	**2,680**	**67,784**	**20,152**	**87,936**	**145**	.....	**35**	.....	**180**	.....	**1,033**	.....	**256**	.....	**1,289**	.....	**5,415**	.....	**1,132**	.....	**6,547**	.....	**95**	**178**
Average, 1914	.....	.....	.....	.....	.....	2.14	.....	1.74	.....	2.05	.....	15.24	.....	12.70	.....	14.66	.....	79.89	.....	56.17	.....	74.45	.....	.....

CALENDAR YEAR 1913.

Cement rock	84	4,637	2,590	7,227	13	2.81	8	3.09	21	2.91	135	29.11	72	27.80	207	28.64	870	187.62	386	149.03	1,256	173.79	7	21
Granite	495	11,575	6,142	17,717	17	1.48	4	.65	21	1.19	118	10.19	29	4.72	147	8.30	695	60.04	152	24.74	847	47.81	8	19
Limestone	1,575	39,121	14,868	53,989	70	1.79	23	1.55	93	1.72	389	9.94	135	9.08	524	9.71	2,784	71.17	580	39.01	3,364	62.31	36	67
Marble	64	2,667	335	3,002	4	1.50	1	2.99	5	1.67	31	11.62	4	11.94	35	11.66	148	55.49	7	20.90	155	51.63	.....	.....
Sandstone and bluestone	422	7,037	1,966	9,003	8	1.14	1	.51	9	1.00	52	7.39	6	3.05	58	6.44	411	58.41	39	19.84	450	49.98	4	11
Slate	140	3,763	3,274	7,037	16	4.25	2	.61	18	2.56	22	5.85	4	1.22	26	3.70	45	11.96	40	12.22	85	12.08	11	20
Trap rock	161	6,587	1,716	8,303	11	1.67	5	2.91	16	1.93	71	10.78	24	13.99	95	11.44	446	67.71	44	25.64	490	59.01	9	12
Total, 1913	**2,941**	**75,387**	**30,891**	**106,278**	**139**	.....	**44**	.....	**183**	.....	**818**	.....	**274**	.....	**1,092**	.....	**5,399**	.....	**1,248**	.....	**6,647**	.....	**75**	**150**
Average, 1913	.....	.....	.....	.....	.....	1.84	.....	1.43	.....	1.72	.....	10.85	.....	8.87	.....	10.28	.....	71.62	.....	40.40	.....	62.55	.....	.....

TABLE 2.—*Number of men killed and injured in and about* ***all*** *quarries in the United States during the calendar year 1914 and the percentage of deaths and injuries due to each cause.*

Kind of quarry.	In quarry.													Outside of quarry.												Grand total.			
	Falls of slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surfaces, benches or face.	Falling from hoists, derricks, buildings, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (including locomotives or drills).	Flying pieces of rock from blasting.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Killed:																													
Cement rock	8	.....	.....	4	3	.....	1	.....	1	.....	.....	.....	.....	17	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	3	20	21	30	29
Granite	9	2	.....	9	4	1	.....	.....	.....	1	.....	.....	3	32	1	1	1	1	.....	.....	.....	.....	.....	.....	1	6	38	21	29	29
Limestone	21	1	.....	13	8	7	.....	.....	1	6	.....	.....	1	59	3	5	1	2	2	.....	2	1	.....	2	5	20	79	93	101	90
Marble	2	1	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	5	12	2
Sandstone and bluestone	4	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Slate	6	.....	.....	1	1	1	1	.....	.....	.....	.....	.....	1	11	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	1	9	9	8	14
Traprock	3	2	.....	.....	1	2	.....	.....	.....	1	4	.....	.....	11	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	3	14	18	15	16
																										2	13	16	13	8
Total	**53**	**6**	.....	**31**	**20**	**15**	**3**	.....	**2**	**8**	.....	.....	**7**	**145**	**1**	**6**	**3**	**4**	**5**	**1**	**2**	**1**	.....	**4**	**8**	**35**	**180**	**183**	**213**	**188**
Percentage of total	29.45	3.33	.....	17.22	11.11	8.33	1.67	.....	1.11	4.44	.....	.....	3.89	80.55	.56	3.33	1.67	2.22	2.78	.56	1.11	.56	.....	2.22	4.44	19.45	100.00	.....	.....	.....
Seriously injured:																														
Cement rock	25	32	12	16	38	10	2	6	.....	6	7	.....	6	160	9	4	3	.....	5	3	4	2	.....	1	9	40	200	207	119	150
Granite	35	34	9	16	29	10	3	16	.....	8	12	.....	15	187	6	2	4	.....	3	.....	1	.....	.....	1	10	27	214	147	127	110
Limestone	81	100	26	42	69	12	3	17	1	32	32	.....	28	445	22	8	44	2	14	.....	18	2	.....	11	22	144	589	524	463	436
Marble	4	10	7	.....	8	2	.....	5	.....	1	1	.....	2	40	2	1	2	.....	1	.....	3	.....	.....	.....	1	10	50	35	44	15
Sandstone and bluestone	9	13	3	4	4	5	5	4	.....	5	2	1	7	62	.....	1	2	.....	.....	.....	.....	.....	.....	1	2	6	68	58	61	42
Slate	13	4	4	1	4	3	1	.....	.....	1	.....	.....	.....	32	1	1	.....	.....	.....	.....	.....	.....	.....	1	2	5	37	26	28	35
Traprock	19	22	5	8	10	3	2	6	.....	7	15	2	8	107	2	2	4	.....	3	.....	1	.....	.....	4	6	22	129	95	57	74
Total	**186**	**215**	**66**	**87**	**162**	**45**	**16**	**54**	**1**	**61**	**70**	**3**	**67**	**1,036**	**42**	**20**	**59**	**2**	**26**	**3**	**27**	**4**	.....	**18**	**55**	**256**	**1,289**	**1,092**	**899**	**862**
Percentage of total	14.43	16.68	5.12	6.75	12.57	3.49	1.24	4.19	.08	4.73	5.43	.23	5.29	80.14	3.26	1.55	4.58	.15	2.02	.23	2.09	.31	.....	1.40	4.27	19.86	100.00	.....	.....	.....

TABLE 2.—*Number of men killed and injured in and about the quarries in the United States during the calendar year 1914, and the percentage of deaths and injuries due to each cause*—Continued.

Kind of quarry.	In quarry.													Outside of quarry.											Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from holes, derricks, blocks, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burn).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burn).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Slightly injured:																													
Cement rock	155	191	80	26	99	23	6	51	3	33	70	4	31	772	30	5	19	3	20	1	18	2	5	10	60	173	945	1,256	1,084	851
Granite	102	231	95	23	90	27	18	72	1	23	135	5	97	919	19	4	10	....	17	1	19	2	5	3	23	103	1,022	847	570	691
Limestone	331	771	195	88	333	89	24	121	10	121	273	21	147	2,524	55	34	133	2	80	2	111	6	22	42	186	673	3,197	3,364	3,234	2,338
Marble	7	76	45	9	17	7	3	14	....	30	3	3	20	234	4	....	8	1	....	....	5	....	1	....	8	28	262	155	161	107
Sandstone and bluestone	31	71	24	9	38	21	1	18	....	27	49	2	18	309	7	....	13	....	3	....	17	....	....	1	10	51	360	459	251	225
Slate	20	9	2	4	9	3	2	....	....	7	4	....	13	82	....	4	2	....	1	....	1	....	1	....	4	13	95	85	75	74
Traprock	46	220	24	10	28	7	4	29	1	14	166	5	21	575	10	3	25	1	4	....	10	4	3	7	24	91	666	490	278	242
Total	701	1,569	465	169	614	177	58	305	15	255	700	40	347	5,415	125	50	210	7	125	5	181	14	37	63	315	1,132	6,547	6,647	5,653	4,528
Percentage of total	10.71	23.97	7.10	2.58	9.38	2.70	.89	4.66	.23	3.89	10.69	.61	5.30	82.71	1.91	.76	3.21	.11	1.91	.08	2.76	.21	.57	.96	4.81	17.29	100.00	....	....	....

TABLE 3.—*Number of men employed, number of days worked, and number of men killed and injured per 1,000 employed in and about* ***all*** *quarries in the United States during the calendar year 1914.*

State.	Number of active operators.	Number of employees.			Days' work performed.	Average number of days worked.	Number killed.		Number seriously injured.		Number slightly injured.		Widows.	Orphans.
		In quarry.	Outside of quarry.	Total.			Total.	Per 1,000 employed.	Total.	Per 1,000 employed.	Total.	Per 1,000 employed.		
Alabama	28	1,009	353	1,362	336,187	247	2	1.47	16	11.75	62	45.52	1	.....
Arizona	13	101	29	130	20,762	160	.....	.....	1	7.69	3	23.08	.....	.....
Arkansas	14	220	156	376	70,358	187	.....	.....	5	13.30	15	39.89	.....	.....
California	112	3,004	859	3,863	953,650	247	8	2.07	75	19.41	436	112.87	2	3
Colorado	41	644	106	750	201,280	268	.....	.....	7	9.33	33	44.00	.....	.....
Connecticut	45	833	417	1,250	280,093	224	3	2.40	14	11.20	108	86.40	3	6
Delaware	4	130	31	161	39,241	244	.....	.....	1	6.21	5	31.06	.....	.....
Florida	7	156	135	291	81,320	279	.....	.....	.....	.....	3	10.31	.....	.....
Georgia	32	1,221	411	1,632	418,015	256	1	.61	4	2.45	51	31.25	1	5
Idaho	14	157	75	232	34,237	148	.....	.....	5	21.55	9	38.79	.....	.....
Illinois	77	2,717	663	3,380	780,165	231	10	2.96	87	25.74	426	126.04	5	15
Indiana	82	2,691	974	3,665	885,824	242	5	1.36	68	18.55	383	104.50	3	6
Iowa	45	766	208	974	202,141	208	1	1.03	9	9.24	89	82.14	.....	.....
Kansas	54	866	291	1,157	230,888	200	4	3.46	13	11.24	115	99.39	1	1
Kentucky	66	1,768	319	2,087	407,205	195	4	1.92	7	3.35	88	42.17	1	7
Maine	52	1,120	493	1,613	401,830	249	3	1.86	14	8.68	24	14.88	2	1
Maryland	54	1,355	389	1,744	392,088	225	7	4.01	19	10.89	97	55.62	3	5
Massachusetts	108	2,176	993	3,169	704,890	222	4	1.26	63	19.88	405	127.80	3	2
Michigan	33	1,055	676	1,731	393,273	227	7	4.04	52	30.04	231	133.45	5	3
Minnesota	62	1,329	247	1,576	317,063	201	5	3.17	27	17.13	109	69.16	4	8
Missouri	112	3,517	975	4,492	1,067,133	238	7	1.56	25	5.57	238	52.98	3	5
Montana	13	222	45	267	59,444	223	.....	.....	2	7.49	14	52.43	.....	.....
Nebraska	15	378	75	453	90,457	200	1	2.21	.....	.....	9	19.87	.....	.....
Nevada	3	58	6	64	12,190	190	.....	.....	.....	.....	1	15.63	.....	.....
New Hampshire	27	691	275	966	235,848	244	.....	.....	12	12.42	30	31.06	.....	.....
New Jersey	80	2,168	580	2,748	586,230	213	8	2.91	34	12.37	223	81.15	7	16
New Mexico	10	163	13	176	35,231	189	2	11.36	10	56.82	91	517.05	2	.....
New York [a]	138	4,155	747	4,902	1,102,610	225	12	2.45	121	24.68	375	76.50	4	8
North Carolina	24	723	212	935	202,630	217	2	2.14	7	7.49	101	108.02	.....	.....
Ohio	114	5,077	1,251	6,328	1,513,392	239	6	.95	124	19.60	502	88.81	2	5
Oklahoma	13	316	72	388	88,256	227	.....	.....	4	10.31	40	103.09	.....	.....
Oregon	13	182	64	246	37,439	152	.....	.....	1	4.07	12	48.78	.....	.....
Pennsylvania	675	14,463	4,293	18,756	4,452,573	239	31	1.66	241	12.87	1,148	61.31	16	22
Rhode Island	15	338	214	552	140,249	256	2	3.59	8	13.99	24	41.96	2	5
South Carolina	11	249	49	298	72,826	244	1	3.36	10	33.56	44	147.65	1	1

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.

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TABLE 3.—*Number of men employed, number of days worked, and number of men killed and injured per 1,000 employed in and about the quarries in the United States during the calendar year 1914*—Continued.

State.	Number of active operators.	Number of employees.			Days' work performed.	Average number of days worked.	Number killed.		Number seriously injured.		Number slightly injured.		Widows.	Orphans.
		In quarry.	Outside of quarry.	Total.			Total.	Per 1,000 employed.	Total.	Per 1,000 employed.	Total.	Per 1,000 employed.		
South Dakota	18	134	38	172	34,534	201			1	5.81	1	5.81		
Tennessee	56	1,609	565	2,174	503,869	232	2	.92	13	5.98	86	39.56	2	8
Texas	41	882	202	1,084	242,932	224	3	2.77	18	16.61	140	129.15	2	2
Utah	23	373	56	429	98,343	235			10	23.31	29	67.60		
Vermont	87	3,118	557	3,675	1,017,244	277	9	2.45	63	17.14	313	85.17	4	8
Virginia	67	1,608	825	2,433	571,355	235	8	3.29	23	9.45	92	37.81	4	1
Washington	24	997	433	1,430	299,888	210	7	4.90	30	20.98	102	71.33	1	7
West Virginia	40	860	179	1,039	218,216	210	7	6.74	17	16.36	64	61.60	5	8
Wisconsin	113	1,986	626	2,612	558,130	214	7	2.68	25	9.57	120	45.94	5	20
Wyoming	3	74		74	17,928	242			2	27.03	3	40.54		
Other States [a]	2	105	5	110	14,700	134	1	9.09	1	9.09	2	18.18	1	
Total, 1914	**2,680**	**67,784**	**20,152**	**87,936**	**20,456,157**	**233**	**180**	**2.05**	**1,289**	**14.66**	**6,547**	**74.45**	**95**	**178**
Total, 1913	2,941	75,387	30,891	106,278	26,142,237	246	183	1.72	1,092	10.28	6,647	62.55	75	150
Total, 1912	3,103	75,962	37,143	113,105	28,151,043	249	213	1.88	899	7.95	5,653	49.98	81	123
Total, 1911	3,920	79,879	31,075	110,954	25,325,094	228	188	1.69	862	7.77	4,528	40.81	89	129

[a] In 1914 these States were Louisiana and Mississippi.

TABLE 4.—*Number of men killed in and about* ***all*** *quarries in the United States during the calendar year 1914, with the fatalities classified according to cause.*

State.	In quarry.														Outside of quarry.											Grand total.				
	Falls of slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from hoists, derricks, and cableways.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horses or mules.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Alabama					1		1							2													2	2	2	3
Arizona																												1		1
Arkansas																												2		2
California	4					1							1	6			1		1							2	8	19	7	22
Colorado																												1		1
													1	3													3	3	2	3
Connecticut	1	1												1													1	1		1
Georgia	1													1													10	9	11	12
Illinois				3	3	1	1			1				9													5	5	6	6
Indiana				1		1			1					3		1		1								2	1	1	2	4
Iowa	1													1													4	2	5	2
Kansas	1													1		1										2	4	4	8	4
Kentucky				2	1					1				4													3	3	2	3
Maine	1												2	3													5	2	7	6
Maryland	2			3										5				1								1	4	5	8	4
Massachusetts	1					2								3													5	3	3	3
Michigan				3	1					1				4		1		1				1					5	2	2	2
Minnesota				2	1					1				4			1		2							1	7	5	9	9
Missouri	2					2								4												1	3		1	
Montana																														3
Nebraska																												1		
New Hampshire																											1	1	7	3
New Jersey	6			1						1				8													2	2	2	
New Mexico		1		1										2													12	7	15	4
New York [a]	1	2		1	5	2							1	12													2	1		2
North Carolina				1	1									2																

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.

TABLE 4.—*Number of men killed in and about* ***all*** *quarries in the United States during the calendar year 1914, with the fatalities classified according to cause*—Continued.

State.	In quarry.														Outside of quarry.											Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working faces.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surfaces, benches, or faces.	Falling from bluffs, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Ohio	2	....	....	1	....	1	....	....	....	1	....	....	....	5	....	1	....	....	....	....	....	....	....	....	....	1	6	12	8	15
Oklahoma	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1
Oregon	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	3
Pennsylvania	8	1	....	5	5	2	....	....	1	1	....	....	1	24	....	2	1	....	1	1	1	....	....	1	....	7	31	42	49	33
Rhode Island	1	....	....	....	1	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	2	2	2	....	....
South Carolina	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	1	....	1	....
South Dakota	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Tennessee	1	....	....	....	....	1	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	2	5	5	3
Texas	....	....	....	1	1	....	....	....	....	....	....	....	....	2	....	....	....	....	1	....	....	....	....	....	....	1	3	1	3	6
Utah	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	3
Vermont	5	1	....	1	1	....	....	....	....	....	....	....	....	8	....	....	....	....	....	....	....	....	....	....	1	1	2	1	1	3
Virginia	2	....	....	3	....	1	....	....	....	....	....	....	....	6	....	....	....	1	....	....	....	....	....	1	....	....	1	9	14	16	8
Washington	5	....	....	1	....	....	....	....	....	1	....	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	2	8	7	5	1
West Virginia	6	....	....	....	....	1	....	....	....	....	....	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....	7	5	7	9
Wisconsin	1	....	....	1	....	1	....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	6	1
Wyoming	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	1	....	....	1	1	3	7	8	1	4
Other States [a]	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	1	4	1
Total, 1914	53	6	....	31	20	15	3	....	2	8	....	....	7	145	1	6	3	4	5	1	2	1	....	4	8	35	180	....	....	....
Total, 1913	27	11	3	42	20	10	3	3	2	8	2	1	7	139	4	8	12	2	4	....	1	....	....	1	10	44	....	183	....	....
Total, 1912	37	14	4	44	28	10	5	2	4	....	....	....	2	181	10	7	16	3	4	(b)	3	(b)	2	2	9	52	....	....	213	....
Total, 1911	48	(b)	(b)	46	20	16	(b)	....	(b)	(b)	(b)	(b)	6	136	11	7	17	4	(b)	3	(b)	2	(b)	(b)	8	52	....	....	....	188

[a] In 1914 these States were Louisiana and Mississippi.

[b] Not listed as a separate cause in 1911.

TABLE 5.—*Number of men seriously injured in and about* ***all*** *quarries in the United States during the calendar year 1914, with the injuries classified according to cause.*

State.	In quarry.														Outside of quarry.											Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working faces.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surfaces, benches, or faces.	Falling from bluffs, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Alabama	3	3	....	1	5	1	....	1	....	....	....	....	....	14	....	1	1	....	....	....	....	....	....	....	....	2	16	10	13	1
Arizona	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	1	3	3
Arkansas	....	....	....	....	....	2	....	....	....	....	....	1	....	3	....	....	1	....	....	....	....	....	....	....	....	2	5	....	1	1
California	11	15	2	2	12	2	1	....	....	4	7	1	4	61	1	....	4	....	2	....	1	....	....	....	2	4	14	75	68	54	51
Colorado	1	1	1	....	1	....	....	....	....	....	1	....	1	10	1	1	....	....	....	....	....	....	....	....	3	4	14	7	20	5	13
Connecticut	4	2	....	1	1	....	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	1	13	11	9	4
Delaware	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	(a)	....	1
Florida	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Georgia	2	....	....	1	1	....	....	....	....	....	....	....	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	4	4	5	1
Idaho	....	....	1	....	1	....	1	....	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	....	1	1	1	5	2	....	....
Illinois	12	12	7	4	15	1	....	10	....	....	4	....	3	68	....	1	9	....	....	....	2	2	....	1	4	19	87	70	76	58
Indiana	3	3	4	....	12	5	....	2	....	11	1	....	1	44	3	....	4	....	4	....	6	1	....	1	5	24	68	42	44	38
Iowa	....	....	1	2	....	....	....	....	....	1	1	....	....	6	....	....	....	....	1	....	....	....	....	2	....	3	3	14	9	6
Kansas	4	....	....	3	4	....	....	....	....	....	1	....	....	12	....	....	1	....	....	....	....	....	....	....	....	....	13	11	9	26
Kentucky	1	2	....	2	2	....	....	....	....	....	....	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	7	12	16	21
Maine	3	4	....	....	2	....	....	....	....	1	....	....	1	11	....	1	....	....	1	....	....	....	....	....	1	3	14	8	20	16
Maryland	....	3	1	....	2	1	....	2	....	2	2	....	2	15	....	....	....	....	....	....	2	1	....	....	1	4	19	7	23	20
Massachusetts	14	11	2	1	1	1	1	2	....	2	9	....	2	53	2	1	1	....	1	....	1	....	....	....	....	4	10	63	36	36	24
Michigan	5	5	1	2	6	....	1	2	....	2	....	....	2	26	3	2	6	....	2	3	5	1	....	....	....	4	26	52	61	29	24
Minnesota	2	3	1	3	2	2	....	....	....	....	....	....	2	21	2	....	2	....	1	....	....	....	....	....	2	2	6	27	13	11	4
Missouri	2	1	1	3	1	2	....	....	1	5	3	....	3	22	....	....	....	....	....	....	....	....	....	....	....	....	3	25	38	29	37
Montana	....	....	....	....	1	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	1	2	8	2	5
Nebraska	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Nevada	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	(a)	....
New Hampshire	3	1	2	....	....	1	....	3	....	....	....	....	1	11	1	....	....	....	....	....	....	....	....	....	....	1	12	2	12	2

[a] Included in "Other States."

TABLE 5.—*Number of men seriously injured in and about* ***all*** *quarries in the United States during the calendar year 1914, with the injuries classified according to cause*—Continued.

State.	In quarry.														Outside of quarry.													Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from banks, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from blasting.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
New Jersey	7	7	2	3	....	....	....	....	....	4	2	....	....	25	....	1	3	....	1	....	....	....	....	1	3	9	34	74	39	61
New Mexico	....	7	....	1	....	1	....	....	....	1	....	....	....	10	....	....	....	....	....	....	....	....	....	....	....	....	10	....	4	5
New York[a]	7	40	8	14	19	2	2	1	....	4	3	....	9	112	....	....	1	....	4	....	....	....	....	1	3	1	121	70	36	56
North Carolina	2	1	....	2	....	1	....	1	....	....	....	....	1	6	....	....	....	....	....	....	....	....	....	....	....	....	7	8	1	1
Ohio	7	17	10	6	14	1	4	5	....	12	5	....	11	92	7	3	10	....	3	....	2	....	....	....	....	32	124	68	76	59
Oklahoma	1	2	....	1	....	....	....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	2
Oregon	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	2
Pennsylvania	50	53	9	23	30	11	1	4	....	3	17	....	7	208	10	3	5	....	2	....	4	....	....	2	7	33	241	204	125	136
Rhode Island	....	....	1	....	....	....	....	1	....	1	1	....	....	5	....	2	....	....	....	....	....	....	....	....	1	3	8	3	1	6
South Carolina	3	....	2	....	2	....	1	....	....	1	....	....	....	10	....	....	....	....	....	....	....	....	....	....	....	....	10	7	3	2
South Dakota	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	3	....	1
Tennessee	....	....	1	1	2	....	....	3	....	....	....	....	1	8	....	....	4	....	1	....	....	....	....	....	....	5	13	8	52	22
Texas	4	....	1	2	2	....	....	....	....	2	1	....	....	12	....	....	2	2	1	....	....	....	....	1	....	6	18	45	3	14
Utah	8	2	....	....	....	1	....	....	....	2	....	....	....	9	....	....	....	....	1	....	....	....	....	1	....	1	10	2	7	11
Vermont	11	7	7	1	9	4	1	9	....	1	1	....	2	53	4	....	2	....	1	....	3	....	....	....	....	10	63	53	47	36
Virginia	7	1	....	1	3	2	....	....	....	....	....	....	1	15	3	2	1	....	....	....	....	....	....	....	2	8	23	17	7	20
Washington	5	3	1	7	5	1	1	....	....	1	3	....	....	27	....	....	1	....	2	....	....	....	....	....	1	3	30	42	32	20
West Virginia	3	1	....	....	3	3	....	....	....	1	....	....	1	12	3	....	....	....	....	....	1	....	....	....	1	5	17	15	33	7
Wisconsin	5	6	....	1	3	1	1	1	....	....	....	....	3	21	....	....	....	....	....	....	....	....	....	3	1	4	25	27	27	23
Wyoming	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	2	....	2	1
Other States[b]	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	4	....	1
Total, 1914	**186**	**215**	**66**	**87**	**162**	**45**	**16**	**54**	**1**	**61**	**70**	**3**	**67**	**1,033**	**42**	**20**	**59**	**2**	**26**	**3**	**27**	**4**	....	**18**	**55**	**256**	**1,289**	....	....	....
Total, 1913	**139**	**150**	**36**	**74**	**119**	**35**	**27**	**47**	....	**57**	**31**	**3**	**97**	**818**	**38**	**17**	**67**	**6**	**29**	**3**	**24**	**5**	**5**	**14**	**66**	**274**	....	**1,092**	....	....
Total, 1912	**143**	**98**	**33**	**78**	**107**	**38**	**24**	**31**	....	**45**	**53**	....	**30**	**680**	**33**	**28**	**54**	**1**	**41**	**1**	**19**	**1**	....	**9**	**32**	**219**	....	....	**899**	....
Total, 1911	**203**			**(c)**	**128**	**d259**		**61**		**(c)**	**3**	**(c)**	**(c)**	**(c)**	**75**	**728**	**28**	**5**	**52**	**1**	**(c)**	**1**	**(c)**	**(c)**	**(c)**	**44**	**133**	....	....	....	**862**

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Louisiana and Mississippi.
[c] Not listed as a separate cause in 1911.
[d] Includes parts of items in *c*.

TABLE 6.—*Number of men slightly injured in and about* ***all*** *quarries in the United States during the calendar year 1914, with the injuries classified according to cause.*

State.	In quarry.														Outside of quarry.													Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from banks, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from blasting.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Alabama	8	22	4	1	14	....	....	2	....	....	3	....	2	....	56	1	....	....	....	....	1	....	....	....	4	6	62	110	89	110
Arizona	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	3	....	....	....	....	....	....	3	3	4	5	16
Arkansas	2	3	....	....	....	3	2	1	....	1	....	....	1	14	....	....	1	....	....	....	....	....	....	....	....	1	15	5	3	22
California	64	138	10	5	23	8	3	24	1	8	57	2	14	357	6	2	20	1	7	....	4	5	....	7	27	79	436	187	219	263
Colorado	2	4	9	1	2	....	1	1	....	1	....	....	6	27	1	....	....	....	....	1	....	....	1	1	3	6	33	236	56	35
Connecticut	3	41	11	1	5	1	....	4	....	4	24	2	1	97	....	....	4	....	....	....	4	....	1	....	2	11	108	83	20	22
Delaware	....	....	....	....	1	....	....	....	....	....	3	....	....	4	....	....	....	....	1	....	....	....	....	....	....	1	1	5	(a)	....	11
Florida	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	1	3	3	(a)	....	....
Georgia	3	12	1	2	6	....	....	7	2	3	2	1	1	40	....	1	3	....	....	....	1	....	....	....	6	11	51	46	40	88
Idaho	1	5	....	....	2	....	....	....	....	1	....	....	....	9	....	....	....	....	....	....	....	....	....	....	....	....	9	19	2	....
Illinois	32	93	26	9	39	20	6	21	....	17	31	1	18	316	9	5	26	....	11	2	23	2	3	1	28	110	426	566	460	418
Indiana	48	23	27	8	25	9	6	14	6	21	15	6	28	236	10	3	25	....	1	34	....	20	2	5	2	45	147	383	392	476	356
Iowa	10	16	5	1	3	3	....	4	....	5	9	....	1	57	2	1	10	....	....	....	3	....	....	....	7	23	80	93	79	55
Kansas	25	24	2	3	8	1	....	1	....	4	9	....	18	95	4	2	2	....	....	....	....	....	....	1	10	20	115	89	104	161
Kentucky	16	29	2	3	5	....	....	4	....	2	15	2	....	80	1	1	2	....	1	....	1	....	....	....	2	8	88	103	71	57
Maine	2	2	3	3	4	....	....	....	....	2	2	....	5	23	....	....	....	....	1	....	....	....	....	....	....	1	24	18	45	24
Maryland	3	34	16	2	9	2	....	1	....	1	6	....	5	79	4	1	3	....	1	....	3	....	....	3	3	18	97	92	128	74
Massachusetts	34	134	30	3	5	7	4	24	....	14	79	1	23	358	5	1	11	....	3	....	8	....	4	3	12	47	405	379	151	127
Michigan	3	15	22	....	24	5	....	17	....	9	10	4	8	117	4	11	23	1	6	1	22	2	12	2	30	114	231	201	102	40
Minnesota	4	35	9	7	6	1	1	1	....	6	20	1	8	99	4	....	1	....	....	....	1	....	....	2	2	10	109	151	83	65
Missouri	40	49	26	6	22	13	2	13	1	8	30	....	5	215	5	....	2	....	5	....	....	....	....	2	9	23	238	395	454	245
Montana	6	2	1	1	....	....	....	....	....	....	3	....	....	13	....	....	1	....	....	....	....	....	....	....	....	1	14	6	18	5
Nebraska	1	....	....	3	1	....	....	....	....	....	1	....	....	6	1	....	2	....	....	....	....	....	....	....	....	3	9	5	5	2
Nevada	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	(a)
New Hampshire	3	1	5	....	7	1	2	1	....	1	....	....	5	24	....	....	....	....	1	1	3	....	....	....	1	6	30	43	27	10
New Jersey	34	47	12	6	23	2	4	13	....	3	46	2	6	198	5	1	6	....	3	....	2	....	....	....	8	25	223	230	277	180

[a] Included in "Other States."

TABLE 6.—*Number of men slightly injured in and about* ***all*** *quarries in the United States during the calendar year 1914, with the injuries classified according to cause*—Continued.

State.	In quarry.																Outside of quarry.												Total in quarry.	Total outside of quarry	Grand total.			
	Falls of slides or rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from hoists, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Defective tools (stock or sharpening).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Defective tools (stock or sharpening).	Hoisting engine.	Horse or mule.	Stepping on nail.	Other causes.	Total outside of quarry	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24								
New Mexico	5	64	1	5	1	1	2	2		16	17	4	6	57	3										1	4	61	2	13	5
New York	11	172	20	16	6	2	1	19		11	46	4	20	357	4	5	38	1			27	1				76	433	315	223	228
North Carolina	37	86	33	14	59	8	4	22	3	58	40	1	27	393	19	8	1	11			1					170	563	471	525	685
Ohio	2	8	1							3	1		3	13													13	57	47	83
Oregon		8	1			1		1		1				11													11	2	39	68
Pennsylvania	151	296	80	42	158	54	3	49	1	24	134	3	23	1,023	19	8	13	2	1	3	37	1	1	20	11	125	1,148	1,205	947	504
Rhode Island	4	3				1				1	15			35													35	44	59	57	9
South Carolina	1	7	5	1				3						16	2						3					5	21	4	18	38
South Dakota	13	15	2			3	2		2		3		3	73			2	1	1		2					6	79	67	102	53
Tennessee	36	18	2	3	9	3	2		2	8	12		2	113													115	154	197	64
Texas	5	13	54	24	34	2				16	9	1	64	224	4	1	9	1	1		3					9	233	288	203	204
Utah	22	29	5	1	2	1	1				3			38													38	57	47	87
Vermont	17	24	10	5	9	4	5	3		2	17	1	1	99	1											1	100	102	85	85
Virginia	11	33	2	1	2			3			5			56	4		2				6					12	68	116	69	38
West Virginia	19	10	2		6	2		4			2		5	56	4		1		2							7	63	127	73	69
Wisconsin	2	27	8	2	11	5		1			1		15	100	1										2	3	103	18	6	2
Wyoming	12	1												2													2			
Other States[b]																														
Total, 1914	701	1,569	465	189	614	177	58	305	15	235	700	40	347	5,415	125	50	210	7	125	5	181	14	37	63	315	1,132	6,547			
Total, 1913	741	1,113	493	223	653	99	63	322	14	252	592	48	795	5,399	116	40	160	10	100	1	352	7	20	82	351	1,048	6,447	6,617		
Total, 1912	861	963	314	182	486	106	96	245	17	270	107	28	212	4,307	308	35	256	10	130	3	318	22	21	59	247	1,346	5,653		5,633	
Total, 1911	1,085		1,210	1,108	227				(c)	(c)	(c)	(c)	585	6,708	84		258		126	3	217	17	(c)	207	280	830				4,528

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Louisiana and Mississippi.
[c] Not listed as a separate cause in 1911.
[d] Includes parts of items in "c."

TABLE 7.—*Number of men employed, number of days worked, and number of men killed and injured in and about the* ***granite*** *quarries in the United States during the calendar year 1914.*

State.	Number of active operators.	Number of employees.			Days' work performed.	Average number of days worked.	Total.			Widows.	Orphans.
		In quarry.	Outside of quarry.	Total.			Killed.	Seriously injured.	Slightly injured.		
Arizona	3	36	5	41	3,458	84	.....	1	3	.....	.....
California	40	1,112	242	1,354	305,626	226	3	15	138	1	1
Colorado	6	53	10	63	14,120	224	.....	.....	.....	.....	.....
Connecticut	31	302	286	588	116,893	199	1	7	12	1	5
Delaware	3	95	31	126	32,346	257	.....	.....	2	.....	.....
Georgia	20	734	325	1,059	258,812	245	.....	1	22	.....	.....
Maine	43	860	448	1,308	312,300	239	1	3	14	1	1
Maryland	11	435	88	523	112,588	215	5	9	38	3	4
Massachusetts	56	861	521	1,382	304,481	220	3	38	134	2	1
Minnesota	27	522	138	660	131,704	200	2	18	45	2	3
Missouri	3	57	50	107	16,180	151	.....	.....	2	.....	.....
New Hampshire	26	683	269	952	233,482	245	.....	12	30	.....	.....
New Jersey	6	125	15	140	18,955	135	1	.....	11	1	5
New York[a]	11	490	96	586	126,062	215	3	23	72	1	3
North Carolina	16	512	84	596	120,021	202	2	4	78	.....	.....
Oregon	8	110	48	158	18,061	114	.....	.....	3	.....	.....
Pennsylvania	27	664	145	809	202,041	250	1	3	8	.....	.....
Rhode Island	12	295	171	466	124,837	268	2	2	22	2	5
South Carolina	10	237	49	286	69,226	242	1	10	44	1	1
Texas	8	100	24	124	27,976	226	.....	.....	18	.....	.....
Vermont	29	1,203	102	1,305	373,661	286	2	33	204	1	1
Virginia	16	404	131	595	124,810	210	4	7	14	2	.....
Washington	9	553	344	897	176,534	197	4	16	74	.....	7
Wisconsin	11	400	225	625	137,004	219	3	7	28	2	10
Other States[b]	10	112	46	158	34,254	217	.....	5	6	.....	.....
Total, 1914	**442**	**11,012**	**3,893**	**14,905**	**3,335,432**	**228**	**38**	**214**	**1,022**	**20**	**47**
Total, 1913	495	11,575	6,142	17,717	4,284,479	242	21	147	847	8	19
Total, 1912	502	12,090	6,845	18,935	4,660,234	246	29	127	570	11	17
Total, 1911	605	13,234	6,714	19,948	4,527,863	227	29	110	691	9	8

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Arkansas, Idaho, Montana, and New Mexico.

TABLE 8.—*Number of men killed in and about the* ***granite*** *quarries in the United States during the calendar year* ***1914,*** *with the fatalities classified according to cause.*

| State. | In quarry. | | | | | | | | | | | | | | | | | | | | | Outside of quarry. | | | | | | | | | | | | | | | | | | |

TABLE 10.—*Number of men killed in and about the* ***limestone*** *quarries in the United States during the calendar year* ***1914****, with the fatalities classified according to cause.*

State.	In quarry.													Outside of quarry.											Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surfaces, benches, or face.	Falling from hoists, derricks, ladders, etc.	Drilling machinery (pneumatic or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Alabama																											2	1	2
Arkansas																												2	1
California																											11	1	4
Colorado																												1	
Illinois					3	1	1			1			6											1	1	7	9	9	12
Indiana				1		1			1				3			1									1	4	5	6	6
Iowa	1												1													1	1	2	4
Kansas																1									2	2		3	1
Kentucky				2	1					1			4													4	2	7	4
Maine	1											1	2													2	1	2	1
Maryland	1												1											1	1	2	1	2	5
Michigan				3						1			4		1			1			1				3	7	5	3	1
Minnesota										1			1													1	2	1	2
Missouri	1					2							3					2						1	3	6	1	8	7
Montana																								1	1	1	1	1	3
Nebraska																										3		1	
New Jersey	3												3														2	2	
New Mexico																										6	5	13	3
New York[a]	1	1		1	2	1							5													3	10	6	10
Ohio	1									1			2		1										1	14	17	19	11
Pennsylvania	4			5	1					1			11		1	1				1					3	1	4	3	3
Tennessee						1							1													3		1	1
Texas				1	1								2					1							1				1
Utah																												1	
Vermont																													
Virginia	1												1													1	4		1
Washington																										7	1		1
West Virginia	6					1							7													3	2	5	1
Wisconsin																					1			1	1	3	7	1	4
Other States[b]	1												1														1		1
Total, 1914	**21**	**1**		**13**	**8**	**7**	**1**		**1**	**6**			**1**	**59**		**5**	**1**	**2**	**2**		**2**	**1**		**2**	**5**	**20**	**73**			
Total, 1913	10	4	1	31	6	4		3	1	5		1	4	70	1	6	3	2	1			3		1	2	23		93		
Total, 1912	16	3	2	20	12	5	1	1	3	3	2		1	75	6	6	6	2	2					2	2	25			101	
Total, 1911	19		(c)	27	9	6		(c)		(c)	(c)	(c)	1	62	6	3	11	3	(c)	1	(c)	2	(c)	(c)	2	28				90

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Louisiana, Nevada, Rhode Island, and South Carolina.
[c] Not listed as a separate cause in 1911.

TABLE 11.—*Number of men employed, number of days worked, and number of men killed and injured in and about the* ***sandstone*** *and* ***bluestone*** *quarries in the United States during the calendar year 1914.*

State.	Number of active operators.	Number of employees.			Days' work performed.	Average number of days worked.	Total.			Widows.	Orphans.
		In quarry.	Outside of quarry.	Total.			Killed.	Seriously injured.	Slightly injured.		
Arizona	6	35	4	39	2,164	55	....	....	....	....	....
Arkansas	5	94	66	160	19,312	102	....	1	6	....	....
California	11	54	34	88	12,357	140	....	2	2	....	....
Colorado	19	142	53	195	43,358	222	....	....	5	....	....
Connecticut	3	112	.....	112	4,680	42	....	3	2	....	....
Idaho	5	28	5	33	5,195	157	....	....	....	....	....
Illinois	4	120	18	138	25,150	189	....	1	39	....	....
Kansas	4	11	1	12	1,425	119	....	....	....	....	....
Kentucky	4	48	.....	48	8,644	180	....	....	2	....	....
Maryland	3	42	4	46	7,510	163	....	....	....	....	....
Massachusetts	8	254	25	279	72,768	261	....	....	29	....	....
Minnesota	3	279	5	284	72,060	254	2	4	24	1	2
Missouri	3	33	.....	33	5,792	176	....	....	....	....	....
Montana	5	120	13	133	25,146	189	....	....	1	....	....
New Jersey	5	78	69	147	36,995	252	1	....	1	1	....
New Mexico	3	22	2	24	2,415	101	....	....	....	....	....
New York [a]	47	735	199	934	201,305	216	....	5	24	....	....
Ohio	36	2,263	196	2,459	601,050	244	3	26	153	2	5
Pennsylvania	138	1,988	507	2,295	483,176	211	2	11	51	....	....
South Dakota	9	94	29	123	23,882	194	....	1	1	....	....
Utah	4	47	3	50	15,931	319	....	4	4	....	....
Virginia	3	28	7	35	4,560	130	....	....	....	....	....
West Virginia	12	164	35	199	37,182	187	....	3	....	....	....
Wisconsin	18	121	21	142	20,259	143	1	2	4	1	2
Other States [b]	16	577	57	634	128,463	203	....	5	7	....	....
Total, 1914	**374**	**7,489**	**1,153**	**8,642**	**1,858,779**	**215**	**9**	**68**	**360**	**5**	**9**
Total, 1913	422	7,037	1,966	9,003	2,049,541	228	9	58	450	4	11
Total, 1912	462	7,240	2,513	9,753	2,067,939	212	8	61	251	4	7
Total, 1911	686	8,628	2,705	11,333	2,309,256	204	14	42	225	6	8

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Alabama, Florida, Indiana, Iowa, Michigan, Mississippi, Nebraska, Nevada, Texas, Washington, and Wyoming.

TABLE 12.—*Number of men killed in and about the* ***sandstone*** *and* ***bluestone*** *quarries in the United States during the calendar year* ***1914****, with the fatalities classified according to cause.*

State.	In quarry.																					Outside of quarry.												Grand total.			
	Falls of slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from hoists, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from blasting.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24						
Arizona																												1		1	
Colorado																															
Connecticut																															
Kentucky																													1		
Massachusetts				1	1									2													2				
Minnesota														1													1				
New Jersey						1								1													3	2			
New York [a]				1																					1	1					
Ohio	1					1								2													1				
Pennsylvania																															
South Dakota																															
Washington																															
Wisconsin	1													1													1				
Other States [b]																															
Total, 1914	**2**		**1**	**2**	**1**	**3**	**1**							**8**													**9**				
Total, 1913	4		2	2	1	1	1							8													9				
Total, 1912	2		1	1	1	3	5				1			6			1	2									8				
Total, 1911	2		(c)								(c)			11			2	(c)		2		(c)					14				

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] In 1914 these States were Alabama, Florida, Michigan, Mississippi, Nebraska, and Nevada.
[c] Not listed as a separate cause in 1911.

TABLE 13.—*Number of men employed, number of days worked, and number of men killed and injured in and about the* ***cement-rock, marble, slate,*** *and* ***trap-rock*** *quarries in the United States during the calendar year 1914.*

State.	Number of active operations.	Number of employees.			Days' work performed.	Average number of days worked.	Total.			Widows.	Orphans.
		In quarry.	Outside of quarry.	Total.			Killed.	Seriously injured.	Slightly injured.		
Cement:											
California	5	292	52	344	92,468	269	2	11	134	1	2
Illinois	5	226	59	285	87,789	308	3	18	43	2	1
Indiana	3	243	234	477	136,548	286	1	21	77	1	2
Kansas	8	195	168	363	85,111	234	2	6	41	1	1
Michigan	5	82	184	266	33,965	150	....	6	21	....	....
Missouri	3	260	44	304	101,446	334	....	9	125	....	....
New Jersey	3	159	46	205	52,709	257	1	9	44	1	....
Ohio	3	113	15	128	33,225	260	....	....	8	....	....
Pennsylvania	16	1,570	358	1,928	524,566	272	....	82	244	4	6
Texas	3	86	15	101	25,372	251	....	2	33	....	....
Utah	3	50	10	60	16,950	283	....	....	9	....	....
Washington	4	172	15	187	47,828	256	3	7	19	....	....
Other States[a]	20	848	219	1,067	274,789	258	2	28	147	1	3
Total	**81**	**4,296**	**1,419**	**5,715**	**1,518,709**	**266**	**20**	**200**	**945**	**12**	**15**
Marble:											
Alabama	3	97	18	115	26,974	235	1	3	6	1	....
California	4	41	....	41	11,318	276	....	1	6	....	....
Georgia	6	343	56	399	116,323	292	1	2	8	1	5
Massachusetts	6	70	7	77	21,980	285	....	3	22	....	....
New Mexico	3	86	5	91	23,730	261	2	9	89	2	....
New York[b]	6	55	14	69	13,593	197	....	2	1	....	....
Tennessee	19	766	62	828	199,068	240	....	4	27	....	....
Vermont	7	735	50	785	231,642	295	3	21	77	1	4
Other States[c]	11	365	78	443	126,910	286	....	5	26	....	....
Total	**65**	**2,558**	**290**	**2,848**	**771,478**	**271**	**7**	**50**	**262**	**5**	**9**
Slate:											
Maine	4	115	22	137	39,084	285	....	9	5	....	....
Maryland	3	55	52	107	24,490	228	....	....	1	....	....
New York[b]	4	44	....	44	10,120	230	....	....	....	....	....
Pennsylvania	70	2,572	1,340	3,912	875,686	224	7	19	59	5	7
Vermont	40	1,094	348	1,442	376,777	261	4	8	27	2	3
Virginia	8	163	155	318	73,900	232	3	3	3	2	1
Other States[d]	4	38	5	43	4,955	115	....	....	....	....	....
Total	**133**	**4,081**	**1,922**	**6,003**	**1,404,931**	**234**	**14**	**39**	**95**	**9**	**11**
Trap rock:											
California	32	1,144	443	1,587	422,256	266	3	39	119	....	....
Connecticut	6	328	22	350	97,785	279	2	4	88	2	1
Maryland	3	175	22	197	43,840	223	....	2	1	....	....
Massachusetts	30	879	400	1,279	261,419	204	1	19	203	1	1
New Jersey	46	1,337	419	1,756	359,029	204	2	16	122	1	1
New York[b]	6	628	2	630	108,990	173	3	16	40	....	....
Pennsylvania	26	740	140	880	191,054	217	2	20	56	2	3
Washington	4	67	15	82	18,790	229	....	2	2	....	....
Other States[e]	9	279	53	332	60,071	181	....	11	35	....	....
Total	**162**	**5,577**	**1,516**	**7,093**	**1,563,234**	**220**	**13**	**129**	**666**	**6**	**6**
Grand total	**441**	**16,512**	**5,147**	**21,659**	**5,258,352**	**243**	**54**	**418**	**1,968**	**32**	**41**

[a] Includes Alabama, Colorado, Georgia, Idaho, Iowa, Kentucky, Minnesota, Montana, New York, Oklahoma, Tennessee, Virginia, and West Virginia.
[b] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[c] Includes Arkansas, Colorado, Maine, Maryland, Missouri, Nevada, North Carolina, Pennsylvania, and Texas.
[d] Includes Arkansas, New Jersey, and Utah.
[e] Includes Delaware, Michigan, New Hampshire, North Carolina, Oregon, Rhode Island, Virginia, and Wisconsin.

TABLE 14.—*Number of men killed in and about the* ***cement-rock, marble, slate,*** *and* ***trap-rock*** *quarries in the United States during the calendar year* ***1914,*** *with the fatalities classified according to cause.*

State.	In quarry.																					Outside of quarry.														Grand total.				
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches, or face.	Falling from hoists, derricks, ladders, etc.	Drilling accidents (by machine or hand drills).	Electricity (shock or burns).	Machinery (not including locomotives or drills).	Flying pieces of rock from sledging.	Sledging on nail.	Other causes.	Total in quarry.	Railway cars or locomotives. (Quarry cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (shock or burns).	Sledging on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.	
Alabama	2	....	1	....	....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....	....	....	....	....	3	6	6	1	1	9
California	....	....	....	....	1	1	....	....	....	....	....	....	1	3	....	....	....	1	....	....	....	....	....	....	1	4	5	6	2	17
Colorado	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1
Connecticut	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	2	....	3
Georgia	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	2	....	1	4
Illinois	....	....	....	3	....	....	....	....	....	....	....	....	....	3	....	....	....	1	....	....	....	....	....	....	1	4	2	2	1	9
Indiana	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	2	2	2	6
Kansas	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	2
Maine	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1
Maryland	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	3
Massachusetts	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	2	4
Michigan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	2
Missouri	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	3	1	5
New Jersey	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	2	5
New Mexico	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1
New York[a]	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	(b)	1	(b) 17
Pennsylvania	3	1	....	1	4	2	....	....	....	1	....	....	....	12	....	....	....	2	....	....	....	....	....	....	2	14	22	20	5	61
Tennessee	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	1	3	2	7
Texas	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	3
Vermont	1	....	....	....	1	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	1	....	....	....	1	3	7	11	5	26
Virginia	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	3	2	8

[a] Reported by W. W. Jones, State mine inspector, Albany, N. Y.
[b] Included in "Other States."

TABLE 14.—*Number of men killed in and about the* ***cement-rock, marble; slate,*** *and* ***trap-rock*** *quarries in the United States during the calendar year* ***1914,*** *with the fatalities classified and according to cause*—Continued.

State.	In quarry.														Outside of quarry.											Grand total.			
	Falls or slides of rock or overburden.	Rock while loading at working face.	Timber or hand tools.	Explosives.	Haulage accidents.	Falling into quarry from surface, benches or face.	Falling from hoists, derricks, ladders, etc.	Drilling accidents (machine drills).	Electricity (block or burns).	Machinery (not including haulage or drilling).	Flying pieces of rock from sledging.	Stepping on nail.	Other causes.	Total in quarry.	Quarry cars or locomotives.	Railway cars or locomotives.	Machinery.	Explosives.	Falls of persons.	Boiler explosions.	Timber or hand tools.	Electricity (block or burns).	Stepping on nail.	Horse or mule.	Other causes.	Total outside of quarry.	1914.	1913.	1912.	1911.
	1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18	19	20	21	22	23	24					
Washington	3												3	3												3		2	4
Other States [a]																												2	1	1
Total, 1914	**19**	**3**		**7**	**7**	**3**	**2**		**1**	**1**			**3**	**46**			**1**	**1**	**2**	**1**						**3**	**8**	**54**			
Total, 1913	9	6	2	6	10	2	2			3	2		2	44	2	1	3		2							3	16		60		
Total, 1912	18	6	1	8	13	1	3		1	3	1			55	2	1	7	1	2		1					6	20			75	
Total, 1911	17		(b)	13	6	3		(b)		(b)	(b)	(b)	3	42	4	1	3	1	(b)		(b)		(b)	(b)	4	13				55

[a] In 1914 these States were Delaware, Kentucky, Montana, Nevada, New Hampshire, North Carolina, Rhode Island, West Virginia, and Wisconsin.
[b] Not listed as a separate cause in 1911.

TABLE 15.—*Percentage of fatalities and number killed per 1,000 employed, by causes, in and about* ***all*** *quarries in the United States during the calendar year 1914.*

Cause of death.	Cement rock.		Granite.		Limestone.		Marble.		Sandstone and bluestone.		Slate.		Trap rock.		Total quarries.	
	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.
In quarry:																
Falls or slides of rock or overburden	40.00	1.87	23.69	0.82	26.58	0.65	28.57	0.78	44.45	0.54	42.87	1.45	23.08	0.53	29.45	0.79
Rock while loading at working face			5.26	.18	1.27	.03	14.29	.40					15.39	.36	3.33	.09
Timber or hand tools																
Explosives	20.00	.93	23.68	.82	16.45	.40	28.57	.78	22.22	.27	7.14	.25			17.22	.46
Haulage accidents	15.00	.70	10.53	.36	10.12	.24	28.57	.78	11.11	.13	7.14	.25	7.69	.18	11.11	.29
Falling into quarry from surface, benches, or face			10.53	.36	8.86	.21			11.11	.13	7.14	.25	15.39	.36	8.33	.22
Falling from hoists, derricks, ladders, etc	5.00	.23			1.27	.03					7.14	.25			1.67	.04
Drilling accidents																
Electricity	5.00	.23			1.27	.03									1.11	.03
Machinery			2.63	.09	7.59	.18							7.69	.18	4.44	.12
Flying pieces of rock from sledging																
Stepping on nail																
Other causes			7.89	.28	1.27	.03					7.14	.25	15.38	.36	3.89	.10
Total, in quarry, 1914 [a]	**85.00**	**3.96**	**84.21**	**2.91**	**74.68**	**1.80**	**100.00**	**2.74**	**88.89**	**1.07**	**78.57**	**2.70**	**84.62**	**1.97**	**80.55**	**2.14**
Total in quarry, 1913 [a]	61.90	2.81	80.95	1.48	75.27	1.79	80.00	1.50	88.89	1.14	88.89	4.25	68.75	1.67	75.96	1.84
Outside of quarry:																
Quarry cars or locomotives			2.63	.26											.56	.04
Railway cars or locomotives			2.63	.26	6.33	.50									3.33	.30
Machinery	5.00	.70	2.63	.26	1.27	.10									1.67	.15
Explosives	5.00	.70	2.63	.26	2.53	.20									2.22	.20
Falls of persons			2.63	.26	2.53	.20					7.14	.52	7.69	.66	2.78	.25
Boiler explosions											7.14	.52			.56	.05
Timber or hand tools					2.53	.20									1.11	.10
Electricity					1.27	.10									.56	.05
Stepping on nail																
Horse or mule			2.63	.26	2.53	.20			11.11	.87					2.22	.20
Other causes	5.00	.70			6.33	.50					7.14	.52	7.69	.66	4.44	.40
Total, outside of quarry, 1914 [b]	**15.00**	**2.10**	**15.79**	**1.54**	**25.32**	**2.01**			**11.11**	**.87**	**21.43**	**1.56**	**15.38**	**1.32**	**19.45**	**1.74**
Total, outside of quarry, 1913 [b]	38.10	3.09	19.05	.65	24.73	1.55	20.00	2.99	11.11	.51	11.11	.61	31.25	2.91	24.04	1.43
Total, in and outside of quarry, 1914 [c]		**3.50**		**2.55**		**1.85**		**2.46**		**1.04**		**2.33**		**1.83**		**2.05**
Total, in and outside of quarry, 1913 [c]		2.91		1.19		1.72		1.67		1.00		2.56		1.93		1.72

[a] Inside accidents based on total number of "inside" employees. [b] Outside accidents based on total number of "outside" employees. [c] Total rates based on total number of employees.

TABLE 16.—*Percentage of serious injuries and number seriously injured per 1,000 employed, by causes, in and about* ***all*** *quarries in the United States during the calendar year 1914.*

Cause of injury.	Cement rock.		Granite.		Limestone.		Marble.		Sandstone and bluestone.		Slate.		Trap rock.		Total quarries.	
	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.
In quarry:																
Falls or slides of rock or overburden	12.50	5.82	16.35	3.18	13.75	2.47	8.00	1.56	13.24	1.20	33.34	3.17	14.73	3.41	14.43	2.75
Rock while loading at working face	16.00	7.45	15.89	3.09	16.98	3.05	20.00	3.91	19.13	1.74	10.26	.98	17.05	3.94	16.68	3.17
Timber or hand tools	6.00	2.79	4.21	.82	4.42	.79	14.00	2.74	4.41	.40	10.26	.98	3.88	.90	5.12	.97
Explosives	8.00	3.72	7.48	1.45	7.13	1.28	.....	.....	5.88	.53	2.56	.25	6.20	1.43	6.75	1.28
Haulage accidents	19.00	8.83	13.55	2.63	11.71	2.11	16.00	3.13	5.88	.53	10.26	.98	7.75	1.79	12.57	2.39
Falling into quarry from surface, benches, or face	5.00	2.33	4.67	.91	2.04	.37	4.00	.78	7.35	.67	7.69	.73	2.33	.54	3.49	.67
Falling from hoists, derricks, ladders, etc	1.00	.47	1.40	.27	.51	.09	.....	.....	7.35	.67	2.56	.25	1.55	.36	1.24	.24
Drilling accidents	3.00	1.40	7.48	1.45	2.89	.52	10.00	1.96	5.88	.53	.....	.....	4.65	1.08	4.19	.80
Electricity	.....	.....	.....	.....	.17	.03	.....	.....	.....	.....	.....	.....	.....	.....	.08	.01
Machinery	3.00	1.40	3.74	.73	5.60	1.01	2.00	.39	7.35	.67	2.56	.25	5.43	1.26	4.73	.90
Flying pieces of rock from sledging	3.50	1.63	3.61	1.09	5.43	.98	2.00	.39	2.94	.27	2.56	.25	11.63	2.69	5.43	1.03
Stepping on nail	.....	.....	.....	.....	.....	.....	.....	.....	1.47	.13	.....	.....	1.55	.36	.23	.04
Other causes	3.00	1.40	7.01	1.36	4.92	.88	4.00	.78	10.30	.94	.....	.....	6.20	1.43	5.20	.99
Total, in quarry, 1914[a]	**80.00**	**37.24**	**87.39**	**18.98**	**75.55**	**13.58**	**80.00**	**15.64**	**91.18**	**8.28**	**82.05**	**7.84**	**82.95**	**19.19**	**80.14**	**15.24**
Total, in quarry, 1913[c]	65.22	29.11	80.27	10.19	74.24	9.94	88.57	11.62	89.65	7.39	84.61	5.85	74.74	10.78	74.91	10.85
Outside of quarry:																
Quarry cars or locomotives	4.50	6.34	2.80	1.54	3.73	2.21	4.00	6.90	.....	.....	2.56	.52	1.55	1.32	3.20	2.08
Railway cars or locomotives	2.00	2.82	.93	.51	1.53	.90	2.00	3.45	1.47	.87	2.56	.52	1.55	1.32	1.55	.99
Machinery	1.50	2.12	1.87	1.03	7.47	4.42	4.00	6.90	2.94	1.73	.....	.....	3.10	2.64	4.58	2.93
Explosives	.....	.....	.....	.....	.34	.20	.....	.....	.....	.....	.....	.....	.....	.....	.15	.10
Falls of persons	2.50	3.52	1.40	.77	2.38	1.41	2.00	3.45	.....	.....	.....	.....	2.33	1.98	2.02	1.29
Boiler explosions	1.50	2.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.23	.15
Timber or hand tools	2.00	2.82	.47	.26	3.06	1.80	6.00	10.33	.....	.....	.....	.....	.78	.66	2.09	1.34
Electricity	1.00	1.41	.....	.....	.34	.20	.....	.....	.....	.....	.....	.....	.....	.....	.31	.20
Stepping on nail	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Horse or mule	.50	.70	.47	.26	1.87	1.11	.....	.....	1.47	.87	.....	.....	3.10	2.64	1.40	.89
Other causes	4.50	6.34	4.67	2.57	3.73	2.21	2.00	3.45	2.94	1.73	12.83	2.60	4.64	3.95	4.27	2.73
Total, outside of quarry, 1914[b]	**20.00**	**28.19**	**12.81**	**6.94**	**24.45**	**14.46**	**20.00**	**34.48**	**8.83**	**5.20**	**17.95**	**3.64**	**17.05**	**14.51**	**19.86**	**12.70**
Total, outside of quarry, 1913[b]	34.78	27.80	19.73	4.72	25.76	9.08	11.43	11.94	10.35	3.05	15.39	1.22	25.26	13.99	25.09	8.87
Total, in and outside of quarry, 1914[c]	.....	**35.00**	.....	**14.38**	.....	**13.78**	.....	**17.56**	.....	**7.87**	.....	**6.50**	.....	**18.19**	.....	**14.88**
Total, in and outside of quarry, 1913[c]	.....	28.64	.....	8.30	.....	9.71	.....	11.66	.....	6.44	.....	3.70	.....	11.44	.....	10.28

[a] Inside accidents based on total number of "inside" employees. [b] Outside accidents based on total number of "outside" employees. [c] Total rates based on total number of employees.

TABLE 17.—*Percentage of slight injuries and number slightly injured per 1,000 employed, by causes, in and about* ***all*** *quarries in the United States during the calendar year 1914.*

Caus of injury.	Cement rock.		Granite.		Limestone.		Marble.		Sandstone and bluestone.		Slate.		Trap rock.		Total quarries.	
	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.	Per cent.	Per 1,000 employed.
In quarry:																
Falls or slides of rock or overburden	16.40	36.08	9.98	9.26	10.35	10.10	2.67	2.74	8.61	4.14	30.53	7.10	6.91	8.25	10.71	10.34
Rock while loading at working face	20.21	44.46	22.60	20.98	24.12	23.53	29.01	29.71	19.72	9.48	9.47	2.20	33.03	39.45	23.97	23.15
Timber or hand tools	8.47	18.62	9.30	8.63	6.10	5.95	17.18	17.59	6.67	3.21	2.11	.49	3.50	4.30	7.10	6.86
Explosives	2.75	6.05	2.25	2.09	2.75	2.69	3.43	3.52	2.50	1.20	4.21	.98	1.50	1.79	2.58	2.49
Haulage accidents	10.48	23.05	8.81	8.17	10.42	10.16	6.49	6.65	10.55	5.07	9.47	2.20	4.21	5.02	9.38	9.06
Falling into quarry from surface, benches, or face	2.43	5.35	2.64	2.45	2.79	2.72	2.67	2.74	5.83	2.81	3.16	.74	1.05	1.25	2.70	2.61
Falling from hoists, derricks, ladders, etc	.63	1.40	1.76	1.63	.75	.73	1.15	1.17	.28	.13	2.11	.49	.60	.72	.89	.86
Drilling accidents	5.40	11.87	7.04	6.54	3.78	3.69	5.34	5.47	5.00	2.40	.....	.....	4.36	5.20	4.66	4.50
Electricity	.32	.70	.10	.09	.31	.30	.....	.....	.....	.....	.....	.....	.15	.18	.23	.22
Machinery	3.49	7.68	2.25	2.09	3.78	3.69	11.45	11.73	7.50	3.61	7.37	1.72	2.10	2.51	3.89	3.76
Flying pieces of rock from sledging	7.41	16.29	13.21	12.26	8.54	8.33	1.15	1.17	13.61	6.54	4.21	.98	24.93	29.76	10.69	10.33
Stepping on nail	.42	.93	.49	.45	.66	.64	1.15	1.17	.56	.27	.....	.....	.75	.90	.61	.59
Other causes	3.28	7.22	9.49	8.81	4.60	4.49	7.63	7.82	5.00	2.40	13.68	3.19	3.15	3.77	5.30	5.12
Total, in quarry, 1914[a]	**81.69**	**179.70**	**89.92**	**83.45**	**78.95**	**77.02**	**89.32**	**91.48**	**85.83**	**41.26**	**86.32**	**20.09**	**86.34**	**103.10**	**82.71**	**79.89**
Total, in quarry, 1913[a]	69.27	187.62	82.05	60.04	82.76	71.17	95.48	55.49	91.33	58.41	52.94	11.96	91.02	67.71	81.22	71.62
Outside of quarry:																
Quarry cars or locomotives	3.17	21.14	1.86	4.88	1.72	5.52	1.53	13.80	1.95	6.07	.....	.....	1.50	6.59	1.91	6.20
Railway cars or locomotives	.53	3.52	.39	1.03	1.06	3.41	.....	.....	.....	.....	4.21	2.08	.45	1.98	.76	2.48
Machinery	2.01	13.39	.98	2.57	4.16	13.36	3.05	27.58	3.61	11.28	2.11	1.04	3.76	16.49	3.21	10.42
Explosives	.32	2.11	.....	.....	.06	.20	.38	3.45	.....	.....	.....	.....	.15	.66	.11	.35
Falls of persons	2.12	14.10	1.66	4.37	2.50	8.03	.....	.....	.83	2.60	1.05	.52	.60	2.64	1.91	6.20
Boiler explosions	.11	.71	.10	.26	.06	.20	.38	3.45	.....	.....	.....	.....	.....	.....	.08	.25
Timber or hand tools	1.90	12.69	1.86	4.88	3.47	11.15	1.91	17.24	4.72	14.74	1.05	.52	1.50	6.59	2.76	8.98
Electricity	.21	1.41	.20	.51	.19	.60	.....	.....	.....	.....	.....	.....	.60	2.64	.21	.69
Stepping on nail	.53	3.52	.49	1.28	.69	2.21	.38	3.45	.....	.....	1.05	.52	.45	1.98	.57	1.84
Horse or mule	1.06	7.05	.29	.77	1.32	4.22	.....	.....	.28	.87	.....	.....	1.05	4.62	.96	3.13
Other causes	6.35	42.28	2.25	5.91	5.82	18.68	3.05	27.58	2.78	8.67	4.21	2.08	3.60	15.84	4.81	15.63
Total, outside of quarry, 1914[b]	**18.31**	**121.92**	**10.08**	**28.46**	**21.05**	**67.58**	**10.68**	**98.55**	**14.17**	**44.23**	**13.68**	**5.78**	**13.68**	**80.03**	**17.29**	**56.17**
Total, outside of quarry, 1913[b]	30.73	149.03	17.95	24.74	17.24	39.01	4.52	20.90	8.67	19.84	47.06	12.22	8.98	25.64	18.78	40.40
Total, in and outside of quarry, 1914[c]	.....	**185.35**	.....	**68 57**	.....	**74.82**	.....	**91.99**	.....	**41.66**	.....	**15.83**	.....	**93.90**	.....	**74 45**
Total, in and outside of quarry, 1913[c]	.....	173.79	.....	47.81	.....	62.31	.....	51.63	.....	49.98	.....	12.08	.....	59.01	.....	62.55

[a] Inside accidents based on total number of "inside" employees. [b] Outside accidents based on total number of "outside" employees. [c] Total rates based on total number of employees.

TABLE 18.—*Number of men killed or injured per 1,000 employed in and about* ***all*** *quarries in the United States during the calendar year 1914, based on the actual average number of days worked, compared with similar data based on a* ***year of 300 working days.***[a]

State.	Average number of days worked, 1914.	Number killed per 1,000 employed.		Number seriously injured per 1,000 employed.		Number slightly injured per 1,000 employed.	
		As reported.	On 300-day basis.	As reported.	On 300-day basis.	As reported.	On 300-day basis.
Alabama	247	1.47	1.79	11.75	14.27	45.52	55.29
Arizona	160	.....	.....	7.69	14.42	23.08	43.28
Arkansas	187	.....	.....	13.30	21.34	39.89	63.99
California	247	2.07	2.51	19.41	23.57	112.87	137.09
Colorado	368	.....	.....	9.33	10.44	44.00	49.25
Connecticut	224	2.40	3.21	11.20	15.00	86.40	115.71
Delaware	244	.....	.....	6.21	7.64	31.06	38.19
District of Columbia [b]	.....	.....	.....	.....	.....	.....	.....
Florida	279	.....	.....	.....	.....	10.31	11.09
Georgia	256	.61	.71	2.45	2.87	31.25	36.62
Idaho	148	.....	.....	21.55	43.68	38.79	78.63
Illinois	231	2.96	3.84	25.74	33.43	126.04	163.69
Indiana	242	1.36	1.69	18.55	23.00	104.50	129.55
Iowa	208	1.03	1.49	9.24	13.33	82.14	118.47
Kansas	200	3.46	5.19	11.24	16.86	99.39	149.09
Kentucky	195	1.92	2.95	3.35	5.15	42.17	64.88
Louisiana [b]	.....	.....	.....	.....	.....	.....	.....
Maine	249	1.86	2.24	8.68	10.46	14.88	17.93
Maryland	225	4.01	5.35	10.89	14.52	55.62	74.16
Massachusetts	222	1.26	1.70	19.88	26.86	127.80	172.70
Michigan	227	4.04	5.34	30.04	39.70	133.45	176.37
Minnesota	201	3.17	4.73	17.13	25.57	69.16	103.22
Mississippi [b]	.....	.....	.....	.....	.....	.....	.....
Missouri	238	1.56	1.97	5.57	7.02	52.98	66.78
Montana	223	.....	.....	7.49	10.08	52.43	70.53
Nebraska	200	2.21	3.32	.....	.....	19.87	29.81
Nevada	190	.....	.....	.....	.....	15.63	24.68
New Hampshire	244	.....	.....	12.42	15.27	31.06	38.19
New Jersey	213	2.91	4.10	12.37	17.42	81.15	114.30
New Mexico	189	11.36	18.03	56.82	90.19	517.05	820.71
New York	225	2.45	3.27	24.68	32.91	76.50	102.00
North Carolina	217	2.14	2.96	7.49	10.35	108.02	149.34
North Dakota [b]	.....	.....	.....	.....	.....	.....	.....
Ohio	239	.95	1.19	19.60	24.60	88.81	111.48
Oklahoma	227	.....	.....	10.31	13.63	103.09	136.24
Oregon	152	.....	.....	4.07	8.03	48.78	96.28
Pennsylvania	239	1.66	2.08	12.87	16.15	61.31	76.96
Rhode Island	256	3.50	4.10	13.99	16.39	41.96	49.17
South Carolina	244	3.36	4.13	33.56	41.26	147.63	181.54
South Dakota	201	.....	.....	5.81	8.67	5.81	8.67
Tennessee	232	.92	1.19	5.98	7.73	39.56	51.16
Texas	224	2.77	3.71	16.61	22.25	128.15	172.97
Utah	225	.....	.....	23.31	31.08	67.60	90.13
Vermont	277	2.45	2.65	17.14	18.56	85.17	92.24
Virginia	233	3.29	4.20	9.45	12.06	37.81	48.27
Washington	210	4.90	7.00	20.98	29.97	71.33	101.90
West Virginia	210	6.74	9.63	16.36	23.37	61.60	88.00
Wisconsin	214	2.68	3.76	9.57	13.42	45.94	64.40
Wyoming	242	.....	.....	27.03	33.51	40.54	50.26
Not segregated	134	9.09	20.35	9.09	20.35	18.18	40.70
Average, 1914	**233**	**2.05**	**2.64**	**14.66**	**18.88**	**74.45**	**95.86**
Average, 1913	246	1.72	2.10	10.28	12.53	62.55	76.28
Average, 1912	249	1.88	2.27	7.95	9.58	49.98	60.24
Average, 1911	228	1.69	2.23	7.77	10.21	40.81	53.64

[a] For details giving number killed and injured, number employed, and days worked, see Table 3.
[b] Included in "Not segregated."

TABLE 19.—*Fatality rates in quarries, coal and metal mines, based on the actual average number of men employed and the equivalent of 300-day workers.*

Basis of figures.	1913			1914		
	Number of men employed.	Number killed.	Number killed per 1,000 employed.	Number of men employed.	Number killed.	Number killed per 1,000 employed.
Quarries.						
Average number employed	106,278	183	1.72	87,936	180	2.05
Number of 300-day workers	87,141	183	2.10	68,187	180	2.64
Metal mines.						
Average number employed	191,276	683	3.57	158,115	559	3.54
Number of 300-day workers	183,593	683	3.72	142,619	559	3.92
Coal mines.						
Average number employed	747,644	2,785	3.73	763,185	2,454	3.22
Number of 300-day workers	593,131	2,785	4.70	526,597	2,454	4.67

TABLE 20.—*Number of men employed and number of men killed in and about* ***all mines*** *and* ***quarries*** *in the United States during 1911, 1912, and 1913.*

Year.	Coal mines.			Metal mines.		
	Number employed.	Number killed.		Number employed.	Number killed.	
		Total.	Per 1,000 employed.		Total.	Per 1,000 employed.
1911	728,348	2,719	3.73	165,979	695	4.19
1912	722,662	2,360	3.27	169,199	661	3.91
1913	747,644	2,785	3.73	191,276	683	3.57
1914	763,185	2,454	3.22	158,115	559	3.54

Year.	Quarries.			Total, mines and quarries.		
	Number employed.	Number killed.		Number employed.	Number killed.	
		Total.	Per 1,000 employed.		Total.	Per 1,000 employed.
1911	110,954	188	1.69	1,005,281	3,602	3.58
1912	113,105	213	1.88	1,004,966	3,234	3.22
1913	106,278	183	1.72	1,045,198	3,651	3.49
1914	87,936	180	2.05	1,009,236	3,193	3.16

TABLE 21.—*Percentage of persons killed by different causes in and about* ***coal mines, metal mines,*** *and* ***quarries*** *in the United States during 1911, 1912, 1913, and 1914.*

Kind of mine.	Cause of death.								
	Falls of overburden or quarry material, ore, or coal.	Explosives.	Haulage and handling rock, ore, or coal.	Falls of person.	Electricity.	Machinery.	Gas and dust explosions.	Other causes.	Total.
1911:									
Coal mines	48.58	4.93	17.54	1.54	3.46	1.77	13.94	8.24	100.00
Metal mines	32.52	11.23	7.63	15.39	2.45	3.16	.....	27.62	100.00
Quarries	**25.53**	**26.60**	**20.21**	**8.51**	**1.06**	**9.04**	.....	**9.05**	**100.00**
1912:									
Coal mines	48.77	5.64	19.11	1.19	3.60	1.86	12.75	7.08	100.00
Metal mines	34.32	14.21	9.99	13.91	3.78	3.78	.....	19.51	100.00
Quarries	**23.84**	**22.07**	**22.07**	**9.39**	**1.88**	**10.80**	.....	**9.85**	**100.00**
1913:									
Coal mines	45.39	4.96	18.63	1.80	3.16	1.79	18.46	5.81	100.00
Metal mines	36.16	13.04	11.42	12.31	3.80	3.94	.....	19.33	100.00
Quarries	**20.76**	**24.04**	**18.04**	**9.29**	**2.73**	**10.92**	.....	**14.22**	**100.00**
1914:									
Coal mines	46.09	5.95	18.78	2.85	4.08	2.08	14.22	5.95	100.00
Metal mines	37.56	10.73	8.96	16.11	3.04	2.51	.....	21.09	100.00
Quarries	**29.45**	**19.44**	**17.22**	**12.78**	**1.67**	**6.67**	.....	**12.77**	**100.00**

TABLE 22.—*Number of active operators, number of men employed, and average number of days worked in* ***all quarries*** *in the United States during the calendar years 1911, 1912, 1913, and 1914.*

State.	Number of active operators.				Number of men employed.				Average number of days worked.			
	1911	1912	1913	1914	1911	1912	1913	1914	1911	1912	1913	1914
Alabama	32	29	31	28	2,152	1,895	1,787	1,362	271	289	267	247
Arizona	17	13	9	13	201	285	133	130	190	265	224	160
Arkansas	28	36	17	14	674	813	257	376	162	236	192	187
California	130	122	113	112	3,845	4,412	3,496	3,863	267	284	263	247
Colorado	55	39	42	41	783	1,475	928	750	256	307	273	268
Connecticut	48	49	49	45	1,169	1,787	2,227	1,250	195	257	253	224
Delaware	4	(a)	(a)	4	270	(a)	(a)	161	229	(a)	(a)	244
Florida	4	(a)	(a)	7	111	(a)	(a)	291	233	(a)	(a)	279
Georgia	44	34	38	32	2,029	1,996	2,015	1,632	169	216	262	256
Idaho	20	17	16	14	139	210	228	232	124	203	227	148
Illinois	95	90	86	77	4,586	4,153	5,647	3,389	251	243	207	231
Indiana	114	102	94	82	5,059	5,910	5,214	3,665	217	251	246	242
Iowa	75	69	54	45	1,134	1,271	1,169	974	210	289	306	208
Kansas	99	68	66	54	2,410	2,482	2,100	1,157	184	195	187	200
Kentucky	104	88	73	66	2,828	2,304	2,318	2,087	189	200	191	195
Louisiana	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Maine	82	63	66	52	2,563	1,914	2,257	1,613	252	224	261	249
Maryland	59	64	56	54	2,291	3,028	2,419	1,744	231	267	237	225
Massachusetts	126	122	121	108	3,666	4,287	4,245	3,169	241	254	246	222
Michigan	30	32	31	33	1,225	1,832	1,811	1,731	180	237	246	227
Minnesota	91	76	62	62	2,201	2,458	2,161	1,576	204	246	242	201
Mississippi	.....	.....	.....	(a)	.....	.....	.....	(a)	.....	.....	.....	(a)
Missouri	171	134	107	112	4,850	4,063	4,042	4,492	216	249	232	238
Montana	16	15	14	13	277	307	165	267	238	234	284	223
Nebraska	11	12	10	15	227	530	533	453	281	189	216	200
Nevada	(a)	4	4	3	(a)	43	59	64	(a)	238	181	190
New Hampshire	29	28	27	27	1,097	1,451	865	966	232	233	252	244
New Jersey	92	81	92	80	3,073	3,766	3,189	2,748	221	251	247	213
New Mexico	11	9	6	10	570	436	182	176	187	222	231	189
New York	353	181	178	138	7,750	4,688	5,190	4,992	213	210	238	225
North Carolina	34	30	27	24	1,561	1,183	992	955	240	255	238	217
Ohio	231	193	178	114	8,779	8,021	7,930	6,328	237	233	245	239
Oklahoma	33	19	16	13	1,207	814	448	388	275	271	270	227
Oregon	28	18	16	13	407	262	228	246	172	144	117	152
Pennsylvania	966	735	710	675	21,111	21,845	22,090	18,726	227	258	236	239
Rhode Island	15	16	15	15	949	956	1,007	572	259	271	245	256
South Carolina	13	10	11	11	432	340	265	298	256	262	260	244
South Dakota	20	21	19	18	290	291	346	172	239	212	180	201
Tennessee	71	75	59	56	2,566	3,171	2,373	2,174	234	235	267	232

a Included in "Not segregated."

TABLE 22.—*Number of active operators, number of men employed, and average number of days worked in* ***all quarries*** *in the United States during the calendar years 1911, 1912, 1913, and 1914*—Continued.

State.	Number of active operators.				Number of men employed.				Average number of days worked.			
	1911	1912	1913	1914	1911	1912	1913	1914	1911	1912	1913	1914
Texas	49	41	42	41	1,748	1,826	1,211	1,084	226	237	237	224
Utah	40	32	27	23	520	630	380	429	238	269	248	225
Vermont	107	98	94	87	3,786	4,613	4,036	3,675	261	276	285	277
Virginia	85	72	69	67	2,711	2,870	2,760	2,433	244	272	241	235
Washington	48	28	25	24	2,353	1,699	1,078	1,430	247	235	273	210
West Virginia	61	46	43	40	1,403	2,571	2,019	1,039	230	255	261	210
Wisconsin	166	136	114	113	3,579	3,650	2,916	2,612	222	229	217	214
Wyoming	9	9	3	3	72	195	126	74	199	142	336	242
Not segregated	4	7	11	2	78	332	797	110	246	271	261	134
Total	3,929	3,163	2,941	2,680	110,954	113,105	106,278	87,936	228	249	246	233

TABLE 23.—*Value of quarry products in the United States.*[a]

Year.	Limestone.	Lime.	Granite.	Trap rock.	Portland cement.
1891	[b] $15,792,000	(c)	$13,867,000	.....	$967,429
1892	[b] 18,342,000	(c)	12,642,000	.....	1,153,600
1893	[b] 13,947,222	(c)	8,808,934	.....	1,158,138
1894	[b] 16,190,118	(c)	10,029,156	.....	1,383,473
1895	9,974,222	$6,588,822	8,894,328	.....	1,586,830
1896	8,387,900	6,327,900	7,944,994	.....	2,424,011
1897	9,135,567	6,390,487	8,905,075	.....	4,315,891
1898	9,956,417	6,886,549	9,324,406	.....	5,970,773
1899	13,899,302	6,983,067	10,343,298	$1,275,041	8,074,371
1900	13,556,523	6,797,496	10,969,417	1,706,200	9,280,525
1901	18,202,843	8,204,054	14,266,104	1,710,857	12,532,360
1902	20,895,385	9,355,618	16,083,475	2,181,157	20,864,078
1903	22,372,109	9,255,882	15,703,793	2,732,294	27,713,319
1904	22,178,964	9,951,456	17,191,479	2,823,546	23,355,119
1905	26,025,210	10,941,680	17,563,139	3,074,554	33,245,867
1906	27,327,142	12,480,653	18,562,806	3,736,571	52,466,186
1907	31,737,631	12,656,705	18,064,708	4,594,103	53,992,551
1908	27,682,002	11,091,186	18,420,080	4,282,406	43,547,679
1909	32,070,401	13,846,072	19,581,597	5,133,842	52,858,354
1910	34,603,678	14,088,039	20,541,967	6,452,141	68,205,800
1911	33,897,612	13,689,054	21,194,228	6,739,141	66,248,817
1912	36,729,800	13,970,114	19,225,302	7,560,049	67,016,928
1913	38,745,429	14,648,362	20,793,500	9,289,809	[d] 89,106,975
1914	33,894,155	13,247,676	20,028,919	7,865,998	[d] 80,118,475

Year.	All other cement.	Marble.	Sandstone.	Slate.	Bluestone.	Total.
1891	$5,704,008	$3,610,000	$8,700,000	$3,825,746	[e] $1,500,000	$53,966,182
1892	5,999,150	3,700,000	8,315,000	4,117,125	[e] 1,600,000	55,874,375
1893	3,251,757	2,411,092	5,295,151	2,523,173	[e] 1,000,000	38,395,467
1894	3,635,731	3,199,585	3,955,847	2,790,324	[e] 900,000	42,084,234
1895	3,895,424	2,825,719	4,211,314	2,698,700	[e] 750,000	41,425,359
1896	4,049,202	2,859,136	4,023,199	2,746,205	[e] 750,000	39,512,547
1897	3,802,392	3,870,584	4,065,445	3,524,614	[e] 900,000	44,970,055
1898	3,888,728	3,629,940	4,724,412	3,723,540	[e] 1,000,000	49,104,763
1899	4,814,771	4,011,681	4,924,670	3,962,733	815,284	59,094,218
1900	3,728,848	4,267,253	5,272,865	4,240,466	1,198,519	61,018,112
1901	3,254,429	4,965,699	6,974,199	4,787,525	1,164,481	76,062,551
1902	4,502,302	5,044,182	9,430,958	5,696,051	1,163,525	95,196,731
1903	4,228,022	5,362,686	9,482,802	6,256,885	1,779,457	104,887,249
1904	2,676,801	6,297,835	8,482,162	5,617,195	1,791,729	100,966,286
1905	2,685,676	7,129,071	8,075,149	5,496,207	1,931,625	116,168,178
1906	2,836,091	7,582,938	7,147,439	5,668,346	2,021,898	139,830,070
1907	1,911,300	7,837,685	6,753,762	6,019,220	2,117,916	145,685,581
1908	929,977	7,733,920	5,831,231	6,316,817	1,762,860	127,598,158
1909	772,209	7,548,905	5,564,052	5,441,418	1,446,402	144,263,232
1910	546,292	6,992,779	6,394,832	6,236,759	1,535,187	165,597,474
1911	456,319	7,546,718	5,854,395	5,728,019	1,876,473	165,230,776
1912	447,585	7,786,458	5,387,848	6,043,318	1,505,763	165,668,165
1913	443,552	7,870,890	5,752,205	6,175,476	1,280,862	194,107,360
1914	414,728	8,121,412	[f] 7,501,808	5,706,787	(g)	176,899,958

a Compiled from Mineral Resources of the United States, U. S. Geological Survey.
b Includes limestone used for manufacture of lime.
c Included in limestone.
d Value of shipments.
e Estimated.
f Includes bluestone.
g Included in sandstone.

TABLE 24.—*Value of quarry products in the United States, by States: 1913.*

[From Mineral Resources, U. S. Geol. Survey.]

State.	Limestone.	Lime.	Granite.	Trap rock.	Portland cement (shipments).	All other cement.	Marble.	Sandstone (including bluestone and quartzite).	Slate.	Total.
Alabama	$812,664	$290,394			(a)	(a)	(a)	$151,111		$1,254,169
Arizona	6,326	99,550	$13,270		(a)			88,391		207,539
Arkansas	52,220	95,846	378,110					89,395		615,571
California	323,287	569,874	1,451,149	$2,132,245	$8,896,734		$72,768	139,486		13,585,543
Colorado	428,736	46,390	84,497		(a)		(a)	96,964		656,587
Connecticut	(a)	382,347	765,334	713,323				(a)		1,861,004
Delaware			289,987							289,987
Florida	156,589	89,973						(a)		246,562
Georgia	83,899	13,483	906,470		(a)	(a)	1,101,997	(a)	(a)	2,105,849
Idaho	18,569	22,413	113,710					20,111		174,803
Illinois	4,112,172	433,331			4,784,696	(a)		28,781		9,358,980
Indiana	4,649,597	323,935			10,218,867	(a)		(a)		15,192,369
Iowa	893,682	47,520			3,972,876			1,612		4,825,690
Kansas	824,005	(a)			3,286,861	(a)		1,602		4,112,468
Kentucky	1,069,034	24,313			(a)			81,171		1,174,518
Louisiana	(a)									(a)
Maine	(a)	906,604	1,790,279						$323,998	3,020,881
Maryland	282,241	357,392	806,259		(a)		(a)	16,435	83,993	1,546,320
Massachusetts	(a)	685,541	2,123,407	1,407,180			276,819	188,949		4,779,876
Michigan	1,408,708	331,852		92,201	4,228,879			19,224		6,080,864
Minnesota	636,620	112,300	1,000,917			(a)		315,149		2,064,986
Missouri	2,488,020	734,009	42,484		4,556,822			10,195		7,829,530
Montana	260,915	(a)	31,320		(a)			51,081		343,316
Nebraska	326,287							(a)		326,287
Nevada		(a)								(a)
New Hampshire			1,482,771							1,482,771
New Jersey	280,680	55,775	62,637	1,359,931	3,638,755			69,584	(a)	5,467,362
New Mexico	148,266	8,612	(a)				(a)	66,700		223,578
New York	3,539,043	503,157	746,826	1,077,690	4,801,607	(a)	252,982	1,568,952	144,882	12,635,139
North Carolina	67,132	47,838	1,116,475				(a)	(a)		1,231,445
Ohio	4,945,310	1,976,316			1,721,423	(a)		1,316,028		9,959,077
Oklahoma	246,912	12,160	30,678		(a)			1,010		290,760
Oregon	(a)	30,704	37,807	316,007			(a)	(a)		384,518
Pennsylvania	6,189,145	2,743,197	1,102,206	1,218,918	24,268,800	(a)	(a)	1,359,533	3,733,581	40,615,380
Rhode Island	(a)	(a)	642,375							642,375
South Carolina		(a)	360,476							360,476
South Dakota	4,098	28,610	(a)					163,165		195,873
Tennessee	645,586	288,400			(a)		1,416,952	(a)		2,348,938
Texas	590,289	255,893	76,067		2,663,063			58,750		3,644,062
Utah	368,007	56,704	(a)		1,233,421		(a)	23,965		1,682,097
Vermont	17,715	171,138	3,782,235				3,513,405		1,697,820	9,182,313
Virginia	598,032	805,443	462,162		(a)		(a)	(a)	175,830	2,041,467
Washington	62,913	178,945	140,279	632,915	2,853,260		(a)	560,468		4,428,780
West Virginia	1,046,625	789,901			(a)			146,698		1,983,224
Wisconsin	1,017,135	1,005,496	927,616					213,229		3,163,476
Wyoming	108,234	(a)						(a)		108,234
Not segregated	130,734	125,036	15,797	249,390	7,980,911	$443,552	1,235,967	185,358	15,372	10,382,117
Total	**38,745,429**	**14,648,362**	**20,793,800**	**9,289,809**	**89,106,975**	**443,552**	**7,870,890**	**7,033,067**	**6,175,476**	**194,107,360**

a Included in "Not segregated."

TABLE 25.—*Number of men employed and number killed in and about the quarries of* ***Algeria,*** *1900–1913, inclusive.*[a]

Year.	Number killed.					
	Number employed.	By falls of rock, etc.	By explosives.	By other causes.	Total.	Per 1,000 employed.
1900	2,718	3	.....	4	7	2.58
1901	3,033	1	2	.....	3	.99
1902	3,286	9	1	4	14	4.26
1903	4,398	8	5	.....	13	2.96
1904	6,232	5	1	1	7	1.12
1905	6,714	3	1	.....	4	.59
1906	6,945	9	2	.....	11	1.58
1907	7,228	1	2	3	6	.83
1908	7,032	10	3	3	16	2.28
1909	7,235	12	1	2	15	2.07
1910	6,236	13	4	2	19	3.05
1911	8,705	1	5	6	12	1.38
1912	8,813	5	3	2	10	1.13
1913	.....	.....	.....	.....	.....	.....

[a] Statistique de l'industrie minérale en France et en Algérie

TABLE 26.—*Number of men employed and number of men killed in and about the quarries of* ***Belgium,*** *1901–1912, inclusive.*[a]

Year.	Number employed.	Number killed.		Year.	Number employed.	Number killed.	
		Total.	Per 1,000 employed.			Total.	Per 1,000 employed.
1901	37,270	25	0.67	1907	36,909	41	1.11
1902	36,469	21	.58	1908	36,877	26	.71
1903	37,117	32	.86	1909	35,482	30	.85
1904	37,913	33	.87	1910	35,711	30	.84
1905	38,611	27	.70	1911	35,809	31	.87
1906	37,927	31	.82	1912	.....	.....	.....

[a] Annales de mines de Belgique.

TABLE 27.—*Number of men employed and number killed and injured in and about the quarries of* ***France,*** *1900–1913 inclusive.*[a]

Year.	Number employed.	Number killed or injured.									
		By falls of rocks, etc.		By explosives.		By other causes.		Total.		Per 1,000 employed.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.[b]	Killed.	Injured.[b]
1900	110,291	87	120	8	29	32	161	127	310	1.15	2.81
1901	111,672	65	491	10	91	20	3,426	95	4,008	.85	35.89
1902	111,666	78	603	10	68	18	3,049	106	3,720	.95	33.31
1903	114,363	74	577	11	62	23	3,058	108	3,697	.95	32.33
1904	108,535	73	540	13	46	26	2,669	112	3,255	1.03	29.99
1905	104,837	69	601	4	68	20	2,896	93	3,565	.88	34.01
1906	109,981	59	687	6	59	23	3,249	88	3,995	.81	36.32
1907	110,272	77	683	9	58	19	3,240	105	3,981	.95	36.10
1908	111,690	86	820	8	79	24	3,682	118	4,581	1.00	41.01
1909	111,679	63	840	14	77	16	3,922	93	4,839	.83	43.33
1910	106,728	79	1,033	9	91	19	3,845	107	4,969	1.00	46.56
1911	109,398	59	1,210	18	67	25	4,276	102	5,553	.93	50.76
1912	113,906	63	1,411	14	65	25	4,905	104	6,381	.91	56.33
1913	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[a] Statistique de l'industrie minérale en France et en Algérie. Only accidents in open quarries are given, including a few open-pit iron mines in which 1,000 to 1,200 men are employed. Underground quarries employing about 20,000 men are excluded.

[b] The number injured in 1900 is on the basis of 20 days off duty by reason of the accident. From 1901 to 1913, inclusive, the injury basis is incapacity for work 4 days or more.

TABLE 28.—*Death rate from accidents at all quarries in* ***Great Britain*** *under the quarries act, from 1895 to 1913, inclusive.*[a]

Year.	Number of employees.			Number killed.					
	In quarry.	Outside of quarry.	Total.	In quarry.		Outside of quarry.		Total.	
				Number.	Per 1,000 employed.	Number.	Per 1,000 employed.	Number.	Per 1,000 employed.
Average for 10 years, 1895 to 1904, inclusive.	60,399	45,023	105,422	95	1.57	20	0.45	115	1.09
1905	59,978	34,841	94,819	85	1.42	14	.40	99	1.04
1906	58,385	33,131	91,516	85	1.46	12	.36	97	1.06
1907	55,894	31,920	87,814	75	1.34	14	.44	89	1.01
1908	54,449	31,026	85,475	76	1.40	16	.52	92	1.08
1909	53,064	30,873	83,937	73	1.38	11	.36	84	1.00
1910	54,408	31,429	85,837	75	1.38	9	.29	84	.98
1911	52,053	30,810	82,863	81	1.56	18	.58	99	1.19
1912	51,055	28,832	79,887	56	1.10	19	.66	75	.94
1913	51,266	28,643	80,909	69	1.35	16	.54	85	1.05
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....

[a] Compiled from Mines and Quarries General Report, with statistics.

TABLE 29.—*Number of men employed and number killed in and about the quarries of* ***Italy,*** *1896–1912, inclusive.*[a]

Year.	Number killed.					
	Number employed.	By falls of rock, etc.	By explosives.	By other causes.	Total.	Per 1,000 employed.
1896	30,945	15	2	7	24	.78
1897	31,520	17	1	7	25	.79
1898	32,153	20	1	8	29	.90
1899	33,205	25	.....	9	34	1.02
1900	31,538	15	1	7	23	.73
1901	56,948	13	2	9	24	.42
1902	57,950	42	.....	11	53	.91
1903	58,837	34	2	8	44	.75
1904	59,063	40	3	16	59	1.00
1905	59,342	35	3	11	49	.83
1906	65,648	47	6	16	69	1.05
1907	67,921	33	2	16	51	.75
1908	69,108	40	5	15	60	.87
1909	69,143	38	2	16	56	.81
1910	69,335	38	4	21	63	.91
1911	70,767	53	8	19	80	1.13
1912	.....	.....	.....	.....	.....	.....
1913	.....	.....	.....	.....	.....	.....

[a] Rivista del Servizio Minerario.

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